

Options for Land Reform and Rural Restructuring in South Africa

manner med selle brede greekgestelligetelligetelligetelligete	rit Continui Gallen partie et et estillit (1980-1970 E), et et et et en est et egy et en en proposition d'ingl	a Paris (1) - An (1) An (1	akaan terjan een jaha kaan seli liinda teleberken teleberga alah liinde teleberga liinda seli leberga seli lebe	and the first of the second of the first and the second of the second of the second of the second of the second	Appendix and the second of the
					•
	•				
					•
		•			

	•				

۶.

OPTIONS FOR LAND REFORM AND RURAL RESTRUCTURING IN SOUTH AFRICA

NOVEMBER 1993

This is a revised version of the paper that was presented at the Land Redistribution Options Conference on October 12 - 15, 1993, Johannesburg, South Africa

BACKGROUND

In February 1992, the World Bank in collaboration with various groups in South Africa initiated a report on the agricultural sector in South Africa, which was intended to examine the performance of the sector as well as the policies that shaped the sector. It was immediately clear to the teams preparing various background reports that several areas within agriculture had been especially distorted by the policy environment, e.g., agricultural pricing and marketing policy and land ownership.

In response, and in addition to continuing the analysis of these issues, the World Bank-in collaboration with UNDP and at the request of various groups in South Africa-sponsored a workshop (November 1992) on international experience with agricultural and rural policy issues of the type that a new South African government will face. The papers presented at the Swaziland workshop refrained from offering prescriptions or recommendations for changes in South Africa, and instead focussed on lessons from international experience in these critical areas.

Following the workshop and discussions with various groups in South Africa, a consensus emerged that additional research was needed in several areas, but especially on land reform options. Further, there was agreement that the World Bank could play a useful role in organizing additional work that would examine some land reform options. Two caveats were stipulated: (i) the options developed from the additional work would be considered as one set among others that would be discussed at a future workshop; and (ii) the research program should draw heavily on South African experts.

The present report represents the culmination of that work program. Although the work of drafting the report was completed by a World Bank team, the real work on and analysis of the issues that are examined in this report was done by the teams of South African experts that prepared the background reports used in the preparation of this report. In addition, an Advisory Group provided valuable advice on how to proceed with this work program. The World Bank mission would like to acknowledge an enormous debt to the Advisory Group and the many members of these teams and thank them for their guidance, knowledge, and patience.

Despite this debt to the South African teams for their work, the responsibility for the content of this report rests solely with the World Bank team that drafted it. The report is an effort to identify options for land reform and rural restructuring in South Africa. It is hoped that the mechanisms and options examined in this report will serve as the basis for negotiations and decisions by South Africans on the complex and difficult issues surrounding land reform and rural restructuring.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
PART I: <u>LEGAL FRAMEWORK</u>	. 1
Constitutional Constraints	
Land Legislation and Rural Restructuring	
PART II: A RURAL RESTRUCTURING PROGRAM	7
AGRICULTURAL PRICING AND MARKETING POLICY	
Recent Changes in the Policy Environment	
Impacts of Policy Changes	
Goals for Agricultural Marketing Arrangements in the Future	11
	11
Key Issues for Agricultural Marketing Policy	25
LAND REFORM: LESSONS FROM EXPERIENCE	25 25
International Experience	
LAND REFORM: RESTORATION AND REDISTRIBUTION	27
Invasion	27
Restoration	28
Redistribution	31
LAND REFORM: OUTSTANDING ISSUES	40
Should Current Landowners be Compensated?	40
Rural Poverty	42
PART III: OPTIONS FOR ADMINISTERING	
A RURAL RESTRUCTURING PROGRAM	47
	47
The Policy Framework	48
Administrative Boundaries and Responsibilities	49
Institutional Restructuring	49
Autonomy and Accountability	
Flexibility and Responsiveness	49
Access to and Control of Resources	50
SUPPORT SERVICES	52
Overview and Background	52
Community Led Agricultural and Rural Development	54
Research, Extension, Education, and Training	
Retraining and Reorientation of Existing Services	59
Financial Support Services	60
Other Support Services	63
PART IV: AGRICULTURAL LAND USE ACTIVITIES	
AND RURAL LIVELIHOODS	65
General Principles and Assumptions	66
Potential Beneficiaries, Property Relations, and Farming Options	68
Major Assumptions and Results of Analyzed Models	70
Aggregation	
THE ESTIMATED COST OF A RURAL RESTRUCTURING PROGRAM	
Options for Reducing and Deferring the Fiscal Burden	
	ィブ

TEXT BOXES

	ander Issues and Customary Law in South Africa	
Th	ne New Mexican Land Law	. 5
W	ater Rights	. 6
Fe	rtilizer Use	
	nd Reform in Kenya	
Sh	ould Victims of Apartheid Pay for Land?	29
La	and Markets: What About Land Prices?	42
Ru	ral Development Administration in India	47
	e Redirection of Research	56
	rowth and Small Farmers: Some International Experience	60
Ru	ral Credit: Experience with Group Lending	62
SII	nall-scale Agriculture and the Environment	65
	operty Relations in Rural Restructuring	68
Co	empensation for the Costs of Apartheid	73
	<u>FIGURES</u>	
1:	Models of Land Redistribution	33
2:	Models of Land Redistribution	35
2: 3:	Models of Land Redistribution	35 35
2: 3: 4:	Models of Land Redistribution	35 35 39
2: 3:	Models of Land Redistribution	35 35
2: 3: 4:	Models of Land Redistribution	35 35 39
2: 3: 4:	Models of Land Redistribution A Grant Function Based on Land Value A Grant Function Based on Points Criteria Land Reform or Restitution Process Government-Funded Poverty Alleviation Programs TABLES	35 35 39 43
2: 3: 4: 5:	Models of Land Redistribution A Grant Function Based on Land Value A Grant Function Based on Points Criteria Land Reform or Restitution Process Government-Funded Poverty Alleviation Programs TABLES Main Characteristics of the Four Indicative Farm Models	35 35 39 43
2: 3: 4: 5:	Models of Land Redistribution A Grant Function Based on Land Value A Grant Function Based on Points Criteria Land Reform or Restitution Process Government-Funded Poverty Alleviation Programs TABLES	35 35 39 43 71 74

ACRONYMS

AMC Agricultural Marketing Council
ARC Agricultural Research Council
CBOs Community Based Organizations
DOA Department of Agriculture

DBSA Development Bank of Southern Africa

FAF Financial Aid Fund

GATT General Agreement on Tariffs and Trade

JSBs Joint Services Boards MCP Miller Cum Planter

NAMPO National Association of Maize Producers Organization

NFPMs National Fresh Produce Markets NGOs Non-Governmental Organization

NNSDP National Nutrition and Social Development Program

PRA Participatory Rural Appraisal

PTO Permission to Occupy
PWP Public Works Program
RSCs Regional Services Councils
SAAU South African Agricultural Union
SASA South African Sugar Association

SGDT Small Growers Development Trust
T&V Training and Visit Extension System
UNDP United Nations Development Program

•

BACKGROUND PAPERS

Administrative Requirements for Rural Restructuring, by Susan Lund and Peter Wakelin with Paul Forsyth and Tessa Marcus.

Agricultural Marketing: Red Meat, by Mohammed Karaan, Willie Lubbe, Andreas Nkosi and Johan van Zyl.

Agricultural Marketing: Sugar, by P. Jackson, J. Wixley, G. Christie and J. van Zyl.

Agricultural Marketing: Vegetables, by D.S. Langley, B. Maloa and Johan van Zyl.

Agricultural Marketing: Water, by M. Uys, G.R. Backeberg, C.C. McKenzie and J. van Zyl.

Agricultural Pricing and Marketing, by Johan van Zyl.

Agricultural Supporting Services for Land Reform, by Martin Adams, Vincent Ashworth and Philip Raikes.

Assessment of Existing Agricultural Support Services, by T.J. Bembridge.

<u>Criteria for Participation</u>, by Bongiwe Njobe with Peter Mayende, Cornelius Botha, Bahle Sibisi and Bill Kinsey.

<u>Developing Models of Land Use Activities: Agricultural Development Options</u>, by Mike de Klerk and Rogier van den Brink with Wilfred Wentzel, David Tapson, Julian May and Johann Kirsten.

Financial Support Services, by Gerard Coetzee and Kgotoki Nhlapo.

Legal Issues, by Heinz Klug.

The Mechanics of Financing Land Access in a Rural Reform Programme in South Africa, by Thomas G. Scott.

Requirements for a Rural Social Safety Net to Support Rural Reconstruction and Development in South Africa, by Iraj Abedian, Diana Callear and Julian May.

Rural Land Resettlement: International and South African Experiences, by Teddy Matsetela, Masiphula Mbongwa, Chris de Wet and Paul van Zeyl.

The South African Land Market: An Analysis of Land Prices, by H.D. van Schalkwyk and J. van Zvl.

Theoretical Framework of Appropriate Levels of Subsidization and Cost Recovery, by W.L. Nieuwoudt.

EXECUTIVE SUMMARY

1. This report is concerned mainly with an examination of selected options for the design and implementation of a comprehensive rural restructuring program that includes—but is not limited to—policy reform, land reform, and the provision of essential support services to newly empowered land users. The options for land reform examined in this report consist of two broad components—restoration and redistribution—and are seen as operating in the broader context of a rural development strategy for South Africa. Although most of this report deals with the principles and specifics related to a land reform program, it proved necessary to also examine some of the broader issues related to rural development strategy. Hence, the report examines a somewhat wider range of topics than just land reform. With regard to the status of this document, it is important to understand that this report should be regarded—not as a prescription or a blueprint—but as a starting point for the discussion and design by South Africans of various aspects of a land reform program.

PART I: LEGAL FRAMEWORK

- 2. The starting point for land reform is the legal environment, because historically the legal process in South Africa has been closely linked with dispossession within the rural sector and other parts of the economy. Hence, not only will rural restructuring require a solid grounding in a new constitution and property relations, but the new legal environment will need to address the consequences of the past. There are four main legal issues that need to be examined in the context of rural restructuring.
 - a. The constitutional structure of government which will likely require that a rural restructuring program launch separate initiatives in each region, in order to take account of: (i) each region's exclusive legislative competencies in the functional areas of planning and development, town planning, traditional authorities, indigenous law, delivery of water, electricity and other essential services; and (ii) the competencies each region shares with the national government in the functional areas of local government, agriculture, fish and game preservation, the environment, public works, and regional and local policing.
 - b. The constitutional status of land and property rights will probably be reflected in a property clause in the constitution. If so, that clause needs to be restricted in its scope, and have a clear compensation clause specifying the relevant factors the court must consider in a compensation determination. Further, it is necessary to maintain a clear distinction between the state regulating property, and the state using its power to acquire an individual's property. Even with a property clause in the constitution, it is important for the success of any rural restructuring program that land is given its own constitutional status. Such a clause would take precedence over the general property clause and provide a basis for a restitution process. This would allow claims for restoration of specific land, as well as general claims for restitution arising from dispossession and denial of land rights.
 - c. The <u>constitutional recognition of gender equality</u> needs to address the present legal status of African women—namely that of a minor under the perpetual tutelage of her male relatives—to insure that they will be accorded majority status. This is necessary to insure that women are not excluded from the restitution process.
 - d. The status of national land and environmental legislation will need to be researched in

order to understand the specific legislation and tenure rights applicable in each particular area of the country. This task will be complicated by the lack of documentation about applicable legislation and regulations in some self-governing territories, and even the disappearance of land records in some areas.

PART II: A RURAL RESTRUCTURING PROGRAM

- 3. With a legal framework in place, it is necessary to focus more narrowly on the issues of rural restructuring. The goals of rural restructuring are: (i) the comprehensive political, economic, and social enfranchisement of a population previously disenfranchised; (ii) employment generation; and (iii) poverty-alleviation. The guiding principle in achieving these goals is political and economic liberalization. At the heart of such a process is a new agricultural pricing and marketing policy and a program for land reform. Both of these topics are examined in Part II of this report and are previewed below.
- Agriculture in South Africa has been highly controlled through massive state intervention which paralleled that in other parts of the economy. The policy of distorting—through intervention—the structure of incentives facing farmers has resulted in a serious misallocation of resources, large public sector expenditures, and some environmental degradation. Although steps have been taken in recent years to improve the policy environment in the rural economy, there is still considerable scope for further liberalization. Additional liberalization will increase agricultural efficiency and ensure equal market access for the farmers who will participate in the land reform program. This is essential in order to keep food prices low and to support the employment-intensive economic growth path that is so critical to the future of South Africa. Hence, liberalization of agricultural policy is not just of narrow interest to the rural sector, but can serve as the foundation of growth for the whole economy by supplying employment and secure sources of inexpensive food.
- 5. The process of liberalizing the pricing and marketing system in order to improve its efficiency would not, however, mean the absence of a policy and regulatory framework. The process of liberalization it perhaps better called "re-regulation" than "de-regulation" since it calls for a more subtle and selective role for the public sector. This report discusses seven general policy issues, each of which could be approached from either of these two broad directions. The issues are: macroeconomic policy, marketing controls (to what degree to retain the statutory marketing system), food security, food reserves, import policy, export policy, and marketing institutions.
- 6. At the heart of this report is its exploration of options for land reform, i.e., improving the access of formerly disenfranchised people to a range of land use activities. The starting point for developing a set of options is an examination of experience in this area. Among others things, the lessons of international and South African experience demonstrate that a successful land reform program needs to: (i) be implemented expeditiously in order to avoid a combination of bureaucratic inertia, legal challenges, and the power of present landowners (generally the elite) that are likely to render the program ineffective; (ii) be politically acceptable and legitimate in order to forestall efforts to reverse the reform in the future; (iii) have a clear role for the public and private sectors defined in such a way that beneficiaries can exercise as much choice as possible; programs that have relied entirely on the public sector in the belief that the sector is the only one capable of maintaining integrity, delivering services, determining needs, and managing the process have been failures; and (iv) be part of a clearly articulated broader strategy of economic growth.
- 7. At the outset, it needs to be recognized that where pressure exists for a land reform program there are three basic methods for landless people to gain access to land in any country: (i) invasion; (ii)

restoration; and (iii) redistribution. Where either restoration or redistribution fail to provide land, invasion is often seen as the only option available to the landless population. A continuation of land invasions would present a new South African government with an exceedingly difficult problem. It would mean that the credibility of existing legal institutions will have been undermined because of their inability to implement effectively the land restitution and redistribution processes. Consequently, people who have invaded land are unlikely to respond to court orders to vacate and forced evictions may become necessary. Given the recent history of South Africa, however, it is highly unlikely that a new government will be able to carry out such evictions without causing massive political alienation. In order to avoid large-scale land invasions, an effective program of land restoration and redistribution is necessary.

- 8. The land restoration (or land claims) process involves the return—by means of an administrative or adjudicative process—of specific parcels of land to individuals or communities who were unjustly removed in pursuance of racially based land legislation or policies. The land redistribution process involves providing access to land for selected groups or individuals and supplying them with the necessary support services to use that land effectively.
- 9. This report assumes that a equitable and effective land restoration process (e.g., land claims court) will be implemented and that the remaining issue is the design and implementation of a redistribution process. One of the central tensions in designing the desired land redistribution model is between the desire to address welfare and asset transfer objectives through the redistribution of land and the need to promote the productive use of agricultural land. It is often the case that those individuals who qualify for land or assistance under welfare objectives of a land redistribution program, have little experience in agriculture or related land use activities. In contrast, the most experienced and well-qualified farmers typically do not qualify to receive land under welfare objectives. Hence, designing a program to address one of these objectives will often compromise the other objective.
- 10. The view that emerges from this report is that both of these objectives can be accommodated within a single program, but in order to do so it is essential that there be agreement on the precise objectives and methodology of the land redistribution program. The salient elements that emerge from the options put forward in this report are that:
 - a. market-assisted land redistribution programs tend to perform better than those administered and operated by the public sector;
 - b. the role of the public sector in a land redistribution program centers on ensuring adequate supplies of land in the market and monitoring the overall operation of the program;
 - c. criteria for participation are necessary and must be discussed and agreed in advanced;
 - d. welfare objectives can be met by including a grant component in the program;
 - e. a matching grant scheme that forces participants to use some of their own resources in order to gain access to land will help to assist in self-selection of participants and encourage the productive use of land;
 - f. the grant elements of the program are essential in order to accomplish a redistribution of assets and to ensure that beneficiaries emerge from the program with a net increase in their asset position and low debt/asset ratio as a means of ensuring viability and sustainability of their enterprises;

- g. in addition to addressing the fundamental issue of social justice, these options are likely to significantly increase net rural employment and ensure that the cost of the program is very reasonable;
- h. a redistribution program will not be able to provide land for everyone and the program will need to be complemented by a rural safety net and by programs for urban groups, and
- i. although the discussion concentrates on agriculture and small farmers these are not the limits of the program. It is envisioned that the program will be a vehicle for supporting a wide range of land use activities, including trading activities, and small-scale enterprises.
- 11. To the extent that a South African land redistribution program wishes to address welfare objectives, this could be accomplished through a basic grant scheme. The basic grant element would be available to all individuals who meet the requirements for participation in the program. The size of the basic grant would be determined largely by budgetary considerations and the need of the participants. The grant should be regarded as a core component of the land reform program (e.g., it could be set at a level that would be sufficient to pay for a major share of a rural housing site) to which additional land could be added.
- 12. In order to support increased access to land by individuals or groups who will use land in a productive manner, a matching grant option could be combined with the basic grant component of the program. Under this option the individual or group wishing to gain increased access to land (through purchase or lease arrangements) would provide a portion of the purchase price as would the redistribution program. Therefore, the resources for the purchase (or lease) price of the land would consist of a matching grant from the government—which could be separated or combined with the basic grant—and the beneficiaries' co-payment. This would create an incentive for productive use of the land since the individual or group has a financial interest in the effective use of the land. If necessary, restrictions on land use—for environmental or other reasons—can be addressed through zoning guidelines. The advantages, disadvantages, and variations of this model are explored in the report.
- 13. The next question is who will be allowed to be a direct beneficiary of the redistribution program? International experience clearly indicates that the characteristics of those who participate in such a program is a critical factor in determining the success or failure of the program. Two broad methods for identifying participants are available: (i) self-selection; and (ii) criteria based on certain characteristics of the beneficiaries. Although the former is an option, it is more likely that a new government will wish to impose some criteria. This means that individuals or groups would need to be certified as having the necessary qualifying characteristics before being allowed to participate in the program. For example, points could be assigned for various characteristics that are judged to be desirable, such as relevant experience, social circumstances, and/or gender. Recognizing that the participation criteria must be identified by those who design the actual program, the report stresses the lessons of international experience.
- 14. A central theme of the land redistribution options described in this report is a reliance on market forces for facilitating the acquisition and redistribution of land. At the same time, it is recognized that the government must accept ultimate responsibility for ensuring the success of the redistribution program. A critical requirement for a market assisted redistribution program is the assurance that sufficient land will come on the market and that land prices will not be driven up beyond levels that correspond to the

productivity and profit potential of the land.

PART III: OPTIONS FOR ADMINISTERING A RURAL RESTRUCTURING PROGRAM

- 15. It is important to state that the actual transfer of land—as difficult as that process will be—is only the beginning of the larger process of rural development. The two critical components of that process which are examined in the report are administration and support services. The central theme that characterizes the report's examination of these topics is that communities, however they define themselves, must have the resources (financial and human) needed to specify and gain access to the necessary support services. The role of administrative structures is to ensure that communities have the information and resources needed to participate successfully in this process.
- 16. Fiscal decentralization is needed if the scale, scope and timing of rural restructuring and development activities is to match local needs. Local and district councils need to have the power to generate revenues and to control the expenditure of funds collected. It is envisaged that the new councils would have the power to set rates and collect levies, fees and license charges, and possibly real estate taxes, from their constituents.
- 17. A vital part of the development process is empowering local people (individuals and communities) to take charge of their own affairs, to establish their own priorities, to make choices, and deal effectively with outsiders. Few governments display a real willingness to trust the people to decide for themselves. But where public funds have been transferred directly to local communities and used by them according to their priorities, as in parts of India and in Mexico, the result has been a remarkable acceleration of rural development. Sustainable rural development is about giving people the power to make choices, to take responsibility, and to make those who provide services and inputs accountable to the recipients.
- 18. One option that can be considered for delivering support services would operate like an entitlement scheme, under which a community would be entitled to a bundle of resources for support services. The services could be contracted for a wide range of sources selected by the community. The bundle could include guidelines on the use of the resources such as the share devoted to social and economic infrastructure services. A pre-requisite would be that a management and administration training program be available for the community development council

PART IV: AGRICULTURAL LAND USE ACTIVITIES AND RURAL LIVELIHOODS

- 19. One of the critical assumptions on which the findings of this land reform program hinge is the viability of part time and small-scale rural enterprises, especially in agriculture. In order to assess the potential for income and employment generation of the land redistribution process, a modeling exercise was undertaken as part of this report. The models were derived from South African data on land use, net farm incomes, household size, and agricultural income shares. Although the results can be seen only as indicative, the results clearly indicate a substantial increase in rural employment and income as a result of land redistribution. This is because farming will become more labor intensive and because the increased number of part-time farmers will generate a multiplier effect by adding a large number of non-farm jobs. Moreover, the cost of the farm capital necessary to establish these small holdings is surprisingly small, even at current market prices.
- 20. An example will illustrate this point. If 30% of land moves from large to small farms in the areas studied, a total of about one million rural jobs would be created. The cost of this program to the

government over five years would be approximately R10.2 billion plus a contingency of R2.6 billion, bringing the total cost to the government to R12.8 billion—or about R2.5 billion per year. This implies a cost per job to the government of around R12,800.

- 21. The options examined in this report concentrate on the role of small-scale actors in the rural economy. This is not to suggest that the present large-scale rural actors do not have a role in the rural restructuring. The decision on how much land will go into the rural restructuring process will be taken by a new government. (The scenarios examined in this report range from 10% to 50% of existing commercial farm land going into the land reform process through redistribution and separate from the restoration process.) Under all of the scenarios examined in this report, there is a role for the existing large-scale rural enterprises in production, processing, marketing, and support services. In this regard, the objective of land reform and rural restructuring is to encourage a wider range of farm sizes in order to promote greater efficiency and equity in the rural economy and to supply necessary support services to all farmers.
- 22. Finally, it needs to be stressed again that this report should be regarded as a starting point and a means of stimulating the discussion of land reform options for South Africa. It does not advocate particular solutions, but does seek to provide details as a means of moving the discussion beyond abstract ideas. For this reason, it is hoped that this report will be a tool for finding practical solutions to the outstanding issues.
- 23. Guide for the Reader. As noted earlier, this report found it necessary to examine a wide range of topics under the headings of land reform and strategies for rural restructuring and development. Those readers who want an immediate look at the details of the land reform options, should begin with the material in the last half of Part II entitled "Land Reform: Options for Change". Those readers who wish also to read about the administrative and support mechanisms, should continue by reading Part III.

PART I: LEGAL FRAMEWORK

1. The legal context of any program in post-apartheid South Africa will be a critical element in determining the success of the program. This is especially true for rural restructuring, because historically in South Africa the legal process has been linked with land dispossession. It is imperative that any new legal dispensation address the consequences of this past. If it fails to do so, the legitimacy of the property relations created under a new dispensation will be undermined. Further, it is important to recognize the impact of political and social factors, as well as technical factors, in considering the sustainability of any rural restructuring program. In light of the importance of the legal framework to rural restructuring the report begins by reviewing four critical aspects of the legal framework: (i) the constitutional structure of government; (ii) the constitutional status of land and property rights; (iii) the constitutional recognition of gender equality; and (iv) the status of national land and environmental legislation.

Constitutional Constraints

The Constitutional Structure of Government

- 2. The major political players in South Africa have adopted a model known as strong regionalism as the future form of government structure. Article 118 of the proposed Constitution of the Republic of South Africa (RSA) 1993, adopted by the Negotiating Council on August 10, 1993 specifies functional areas in which the regions shall have exclusive legislative competencies, while granting the national government limited concurrent powers in a separate list of functional areas.
- 3. This implies that a future rural restructuring program would require separate initiatives to be launched in each region, in order to take account of:
 - a. each region's exclusive legislative competencies in the functional areas of planning and development, town planning, traditional authorities, indigenous law, delivery of water, electricity and other essential services; and
 - b. the competencies each region shares with the national government in the functional areas of local government, agriculture, fish and game preservation, the environment, public works, and regional and local policing.
- 4. Further, the regions will have executive power over functional areas where they have either exclusive or concurrent legislative competency. This means that regardless of who passes the laws, the regions will implement them.
- 5. The proposed constitution goes further than before in another respect: the powers and functions of national and regional governments, as defined in the Constitution, may be amended only according to procedures dominated by the regions.
- 6. These developments in the negotiating process make it clear that any legal framework for the creation and implementation of a rural restructuring program will have to contend with regional differences in the legal framework itself, as well as in program implementation. Although there is no specific mention of land law, it can be assumed that property issues, as such, will be accounted for by provisions in the national bill of rights.

- 7. Under the present constitutional proposals, it is still possible to have district level councils for administering land allocation and rural development, as this report advocates later. It also remains possible to have district land committees established by national land legislation, responsible for the allocation of land and the mediation of local land disputes. Although these would be accountable to national government, it is proposed here that they be made up of local representatives of a predetermined list of constituencies, with the national government retaining oversight responsibility.
- 8. However, since the Constitution allocates exclusive powers of regional development to the regions, District development councils, whether democratically accountable or not at the local level, cannot be constitutionally autonomous from regional government with respect to regional development priorities. Nevertheless, regional governments may be encouraged to enshrine relative autonomy for District level administrations in their respective regional constitutions. Alternatively, the regions may implement their constitutional mandate by devolving power to district level structures, although this would have to be consistent with the local government powers secured in the national constitution, and in accordance with any powers constitutionally exercised by the national government. In this regard, a national framework for local government may provide a basis for District level administration of land redistribution and development.

Property Rights in the Constitution

- 9. Although substantial state interference with property rights can be regarded as a fact of twentieth century life, it is also true that given the nature of the democratic transition in South Africa, a constitutionally protected property right provision seems inevitable. Consequently, the extent of interference would depend on judicial interpretation. The tendency of courts in such situations is to grant strong protection to owners, often subordinating all other provisions in the constitution. This can lead to conflict between the courts and a democratically elected legislature and executive, with severe implications for upholding the rule of law and the constitution itself.
- 10. If a property clause is to be adopted, it should be restricted in its scope, and have a clear compensation clause specifying the relevant factors the court must consider in a compensation determination. Further, it is necessary to maintain a clear distinction between the state regulating property, and the state using its power to acquire an individual's property. This distinction is vital to set clear boundaries to the protection of property. While on the one hand the deprivation of property through regulation (e.g., the use of police power to enforce zoning laws or environmental regulations) is subject to procedural and other forms of review, it should not create an obligation on the state to compensate. On the other hand, in the case where through eminent domain the state expropriates private property in the public interest, compensation is payable.
- 11. It is also important to make a distinction between expropriation of property (with or without compensation) in furtherance of a public purpose (e.g. for a public use such as constructing a road or a hospital), and expropriation of property in the public interest (e.g. acquiring land for redistribution). Although South African case law has up to now interpreted public purpose so widely as to destroy this distinction, in other jurisdictions this has sometimes been an important hindrance to any form of redistribution. In order to create a credible alternative in the event of market failure, it is critical for the state to have power of eminent domain in the public interest (to be able to acquire land for redistributive purposes).
- 12. Compensation is a separate but specific aspect of a property provision in a constitution. While most jurisdictions have tended to use market value regardless of what is specified in the constitution, it

is often preferable to adopt an adequate compensation formula specifying explicitly which factors must be considered by a court in reaching its determination. Factors may include: the use to which the property is being put; the history of its acquisition; its market value; the value of the owner's investment in it; the interests of those affected; and the degree of past state investment in the form of subsidies and aid.

A Separate Land Provision

- 13. Even with a property clause in the constitution, it is important for the success of any rural restructuring program that land is given its own constitutional status. This is justified, first, by the historical role of the law in dispossession and loss of land and the need to deal with this legacy, and second, by the fact that land is a specific, limited resource tied to issues of nationhood and cultural identity.
- 14. Taking precedence over the general property clause, a specific land clause in the constitution could provide a basis for a restitution process. This would allow claims for restoration of specific land, as well as general claims for restitution arising from dispossession and denial of land rights. The general claim would provide a basis for redistribution or allocation. whether through market processes or state programs of appropriation redistribution. Together these provisions aim at insulating land reform effectively from constitutional attack, and allowing for adoption of a land reform that is both demand-led and based on affirmative action.
- 15. More specifically, a land clause would recognize different forms of property and tenure relations, and provide for the establishment of specific legal regimes for each, including state property, private property, indigenous (tribal) property, and common property. The land clause should provide a framework for common property rights, at a minimum ensuring democratic process and gender equality. The land

Gender Issues and Customary Law in South Africa

The present subordinate legal status of women within customary law creates a number of specific legal constraints, with the following consequences: (i) exclusion of women's access to title to land and land rights; (ii) incapacity to transmit land title and land rights; (iii) potential exclusion from the claims process and restitution; and (iv) lack of proprietary and contractual capacity.

In addition, the institutionalization of some forms of cultural traditions have the following consequences for women:

(i) lack of representation in decision making processes; (ii) a tendency, on the part of actors including policy makers, planners, architects, and project managers to target the community as a unit of analysis, but not to address the issue as a specific issue of women's dispossession; (iii) when the community initiates and engages in negotiations with local authorities or development agencies, women are typically not allowed to play an active role.

Rural land therefore has been administered by received customary law, with the attendant discrimination against African women. Transgenerational familial land rights have been transformed into rights of control by males. This results from the fact that the institution of traditional leadership, through which land is primarily allocated, and consultative customary practices, have been transformed by successive colonial and apartheid governments, who have imposed their own ideas and models on traditional African practices. What is currently practiced is neither customary nor law.

Although women, who comprise over 80% of the rural adult population, are by customary practice excluded from participation in decision making structures, women in rural areas hold the key to development. Their emancipation through a policy aimed at empowering them to take over the administration of local government structures would ensure apparent and perceived democracy. Because they bear a disproportionate burden in securing the livelihood of their families in rural areas, women have a direct interest in rural development to ensure basic necessities and the means of economic empowerment.

clause <u>may</u> also provide for: recognition and recording of a range of interests in land outside of ownership; a land ceiling, for individuals, or with respect to different types of tenure; gender equality within land tenure relations; and a specific land jurisdiction, together with or separate from the land

claims process.

Gender Issues

- 16. All women in South Africa, but African women in particular, have been discriminated against legally in regard to access to, inheritance of, or ability to bequeath title in land. Promulgation of a new property rights regime provides an opportunity to redress the consequences of past gender discrimination.
- 17. Since customary law and its practices will be subject to constitutionally protected rights, the legal status of African women—namely that of a minor under the perpetual tutelage of her male relatives—would be superseded and African women will be accorded majority status. This change will have far reaching effects in rural society and will significantly increase the number of persons eligible for allocation of land.
- 18. It is important to take into account these changes in constructing land reform policies. There are three particular concerns:
 - a. definitions of what constitutes a household should include female-headed households;
 - b. women should be included in any consultations with beneficiaries to develop a land reform process;
 - c. since there is a danger that women may be excluded from restriction—because of their restricted capacity in the past to make contracts, because titles to most disputed areas are vested in males, and because succession is patrilineal in most ethnic groups—it would be important to include a possibility for all people who can trace their descent to a removal to bring a claim as a class and distribute the proceeds of any award.

Land Legislation and Rural Restructuring

The Existing Legal Structure

- 19. There are approximately 130 statutes affecting land in South Africa, and land law has been fragmented by implementation of the policy of separate development. In the bantustans¹, there may be four different sources of law affecting land: (i) laws made by the South African Parliament on matters referred to in the schedule to the Self-Governing Territories Constitution Act 21 of 1971 as they were on the date the particular territory achieved self-governing status and without reference to any subsequent amendments made to that law by the South African government; (ii) amendments made by a self-governing territory's Legislative Assembly to these laws contained in the schedule; (iii) new laws made by a self-governing territory's Legislative Assembly, (which might replace South African laws or be completely new); and (iv) laws made by the South African Parliament on matters not referred to in the schedule.
- 20. This fragmented system of land legislation has been further splintered by the introduction of what are referred to as reform laws that, on the one hand, gave the State President extraordinary

¹ The term bantustans is used in this report and includes self-governing territories, homelands, TBVC states or "independent" states as particular areas of South Africa

administrative powers to regulate land on an ad hoc basis, while on the other hand providing a system of individual tenure "upgrading". Despite this complex array of legal systems and statutes, it is possible to identify three primary forms of land tenure in the rural areas of South communal tenure on "scheduled land" (as defined in Act 27 of 1913), freehold tenure, and rights under a PTO (permission to occupy), which applies mainly to land set aside to be acquired by the South African Development Trust in terms of Act 18 of 1936. To the extent that individuals or groups implement tenure "upgrading" under the "reform" laws, however, coherence of the limited number of tenure forms will be destroyed.

21. Before any rural restructuring program can be seriously attempted, there will be a need for extensive research into the specific legislation and tenure rights applicable in each particular area of the country. This task will be complicated by the lack documentation about applicable legislation and regulations in some self-governing territories, and even the disappearance of land records in some areas. There will be an urgent need to adopt at least a single national legislative framework in order to

The New Mexican Land Law

Between 1910 and 1990, Mexico transferred about half of its agricultural land to land reform beneficiary communities called Ejidos. The members of the Ejido, in most cases, received inheritable usufruct rights in the arable land and their house sites, and the right to use the common grazing and forestry land. While usufruct rights were inheritable and secure, their owners were not allowed to rent them out sell them, or use them as collateral for loans, which imposed constraints on the larger, more enterprising farmers in the better agricultural areas.

Therefore, Mexico, has recently changed its constitution and adopted a new and law with the objectives of increasing the flexibility of the members of the Ejido and increasing the security of ownership of land held under the private property regime. These changes complement the opening of the economy, the downsizing of the public sector and the planned conclusion of the North American Prec Trade Agreement which is to include Canada, the United States and Mexico.

The amended constitution and the new land law recognize four forms of property:

- State ownership for national parks, and other land held for public use:
- Private land ownership by individuals, partnerships, cooperatives and corporations;
- 3. Ejidal property. This includes the individually beld houses, residential farm buildings and business sites, the arable land, and the commonly beld pasture and forest land. Members are now able to freely rent out and sell their arable plots to other members. They can also, in a supervised vote of the membership, and with a qualified majority, elect to transfer all plots held in individual usufruet to the private property regime. This would then allow them to freely sell the plots to anyone, including nonmembers and land could therefore be used as collateral for loans. The Ejido community property would continue for the commonly held pasture and forest land. The Ejido can also rent out or sell these areas by majority decisions, or farm joint ventures with the private sector.
- 4. Traditional community ownership. This applies to lands which were never alienated from traditional communities to private ownership. The traditional communities enjoy even greater freedom to structure their own internal land relations than the ejidos, and may decide to change to either private or ejidal property regimes.

prevent a complete fragmentation of land rights. Such a national law would need to recognize the different forms of tenure, as well as the degree of local control over land use and development granted in the constitution to the regions.

22. One possibility for providing such a framework would be to allocate land registration, adjudication and mediation to the national level under the Constitution. The constitutional separation of powers would secure local control and national oversight of land holding, and leave the regions free to determine development priorities (see options on structure of government above). This would have the added benefit of enhancing certainty about the process.

Water Rights

It is estimated that by the year 2010, the exploitable water available in South Africa, including surface, underground and return flows; will be about 25.9 billion m², of which about 11.9 billion m², 46% of the total, may be demanded for irrigation. By that year, aboutages or near balances may occur in at least 5 of 14 major groupings of drainage regions. In these regions, irrigation is projected to demand between 15% and \$2% of the available water, at an average rate of use of 7,877 m²/he on 1,231,000 hs. It is further projected that total demand for the country will exceed available supplies beyond the year 2020. Presumably these projections are based on current technology and water charge regimes.

In principle, the supply of water can be increased by storing it in dams, by inter-regional transfer, or by stimulation of rainfall, while demand can be decreased through increased irrigation efficiency, reductions in wastage, and other measures. At present, however, there is no pricing mechanism that could serve to equate water supply and demand, and the process of establishing such a mechanism is not a simple one.

Under the Water Act (Act 54 of 1956), there are only use rights, and so property rights in water. Water rights are linked to land, and in most cases private transfers are possible only through sale of land. Transfer of water rights through sale or lease is prohibited without Ministerial approval. During water shortages, permits of quotas for use can be allocated, reduced, restricted, or prohibited; these controls prevent a market in water rights from developing.

About 53% of prigation water is used in private schemes (fully financed by users), 25% in cooperative schemes (mostly with capital and interest payments postponed or losses written off), and 22% in government schemes (in which official cost recovery is generally set at full operating costs, plus two thirds of capital costs). In government schemes, political pressures have kept tariffs to 1.5-3.0 conts/m², or 6-12% of variable costs of crop production.

In the context of rural restructuring, it will be necessary to make significant changes to water law, and water allocation systems, to ensure that beneficiaries of a land reform program have adequate access to water to support successful farming operations. While the details of new legal and allocation systems remain to be defined, this report identifies several principles which may guide the formation of new arrangements for water use.

- All water would have a similar legal status of being common to all, subject to state control, and subject to uniform allocation rules.
- b. While the regions; under the Constitution, could have exclusive legislative rights over delivery of water, there would need to be a national framework of control over water, in order to; there alia, resolve inter-regional conflicts, protect third party interests, and allow water to be used throughout the country in a way which would maximize economic and social value from its use;
- c. By allowing permits for water use to be negotiable and transferrable, it is possible to establish a market that would provide incentives for water to be used to maximum economic and social advantage.
- d. The initial allocation of permits could be by Authorities established on the basis of the Catchment (river basin). Catchment Authorities would have statutory representation from all groups with an interest in water use, including (but not confined to) use for urban and rural domestic consumption, agriculture (irrigation and livestock consumption), forestry, industry, mining, electricity generation, sustenance of ecological systems and the environment, recreation, fourism, and so on; in general, all statutory representatives would be elected by their groups.
- All interested parties would submit claims, which the Catchment Authorities would review.
- f. Certain allocations would be reserved in the form of untradable permits for use, e.g. allocations for domestic consumption, or set asides to maintain selected ecological conditions (such as minimum stream flows for aquatic life, or wetlands). Such untradable permits would nevertheless not be free of charge as a general rule, but provisions could be made for subsidy if desired.
- g. The bulk of water allocations would be in the form of tradable permits for use, that could be renewable but subject to review at specified intervals, in the interest of allowing the possibility for re-allocation as conditions changed over time. Water undeveloped after a specified period of time would revert to the general permit allocation process.
- h. Tradable permits would be issued only for net consumptive use. Any surplus over and above set consumptive use, (including, in particular, reflow into aquifers and surface return flows), would be subject to further allocation and further tradable permits. Permits would define, among other things, a minimum consumptive use, and how surpluses above this would be used.
- Tradable permits would be subject to specific standards for reflows with respect to effluent treatment and toxic substances such as posticide residues.
- j. Ongoing trade in permits would be, in any case, subject to review by Catchment Authorities, in order to protect the interests of third parties, and enforce reflow standards:
- k. In the trading of permits, the costs of water conveyance, mitigating third party effects, and ensuring reflow standards, would be in general borne by the purchaser of the permit.
- Consumptive water use of commercial forest plantations would also be subject to permits.

PART II: A RURAL RESTRUCTURING PROGRAM

- 23. Against the backdrop of South Africa's recent history of rural relations—and in the context of the legal framework outlined above—a sweeping program of rural development and reconstruction is necessary for the rural economy. The goals of such a program would be comprehensive political, economic, and social enfranchisement of a population previously disenfranchised, productive employment generation, and poverty-alleviating economic development. The guiding principle would be political and economic liberalization. At the heart of such a process would be a new agricultural pricing and marketing policy and a program of land reform. Together these would aim to ensure access for all of the rural population to land, jobs, markets, and food security.
- 24. Although agricultural policy and land reform would be important driving forces for the rural restructuring envisaged, it would be critical for these to be supported by the provision of services to new entrants to agriculture and the labor markets. Among other things this would include economic infrastructure (roads, transport services, water supply, and electricity), social services (education, health and welfare), agricultural services (research, extension, agricultural education, financial services, and marketing), and comprehensive training and assistance with legal, administrative and financial aspects of the program.
- 25. In keeping with the principles of political and economic liberalization, the program outlined below is based on community participation and market-assisted processes. Although the main thrust of poverty alleviation would be through employment and economic growth, some of the poorest groups would not be reached by this. To meet the needs of these groups, the program would include provisions for a welfare system, and, in particular, a public works program which would provide employment while constructing the infrastructure needed in rural areas.
- 26. The sections that follow describe, first, the proposals for agricultural pricing and marketing and the land reform process. These are followed by a discussion of three outstanding issues: compensation in a land redistribution process, land markets, and rural poverty. The main support systems needed for the rural reform process are then outlined. Proposals for administration of the program are described. The report finishes with an assessment of land use options and estimates of the costs of the program and a discussion of financing options.

AGRICULTURAL PRICING AND MARKETING POLICY

27. Agricultural marketing in South Africa has been highly controlled, through massive state intervention which paralleled that in other aspects of the agricultural sector and the economy. Its effects have been to create sharp differences between white farmers and all other farmers in access to marketing services and to income earning opportunities afforded by market access. Some changes have been made to the agricultural marketing system in the past few years, in the direction of reduced state intervention. However, further changes are needed to attain the substantial increases in efficiency and reduction in marketing costs which can still be realized. Such increases in efficiency are essential to keep food prices low and support the employment-intensive economic growth path that needs to be pursued in the immediate future. They are also essential to ensure market access for the farmers who will participate in

the land reform program, and to maintain South Africa's competitiveness in international markets for agricultural commodities. The sections that follow outline the present marketing system, summarize the recent reforms and their impact, and propose goals and options for the future, both in general terms, and for four specific groups of commodities: maize, red meat, vegetables and sugar.

- 28. Under the Marketing Act of 1968 (Act Number 59 of 1968), some twenty-two control boards were set up (with 15 still in existence), many with powers delegated to farmer cooperatives to act as their agents. Four main types of statutory marketing scheme have been established:
 - a. single-channel fixed price schemes, with boards having statutory monopoly marketing powers at prices announced at the beginning of the season (maize, wheat, oats, and barley);
 - b. single-channel pool schemes, with statutory monopoly marketing powers, but with prices based on market realizations (oilseeds, mohair, deciduous fruit, dried fruit, citrus, and lucerne seed);
 - c. surplus removal schemes, with the board intervening to maintain minimum prices (grain sorghum, milk, and tobacco);
 - d. supervisory schemes, where the board plays only a supervisory and mediating role (canning fruit, cotton).
- 29. In 1990, controlled products under the Marketing Act accounted for 67% of gross value of agricultural production, other legislation controlled another 16%, and most of the uncontrolled remainder was poultry products (12%).
- 30. All four TBVC states and Lebowa have official Marketing Boards with statutory powers similar to those outlined above. These were set up during the 1970s and are financed by a mixture of government grants and levies on handling commodities. Some commodities that pass to the South African market are thus subject to a double levy, which reduces producer prices. In the other five bantustan areas, marketing regulations follow those of the South African Boards, although where new local legislation has been developed it is often better suited to local conditions, and tends to keep down handling and processing costs.
- 31. Among examples of distortions arising from the controlled marketing system are the following:
 - a. import controls have propped up domestic prices, allowing importers to purchase at lower world prices and earn excessive profits;
 - b. production quotas have discouraged new entry and given rents to those already in;
 - c. subsidies have resulted in labor displacing capital investment in a context of plentiful labor;

- d. pan-territorial pricing has discouraged the location of production where its comparative advantage was greatest;
- e. statutory powers provided to cooperatives have limited new entry and competition;
- f. environmentally unsustainable expansion of maize on marginal land has been encouraged;
- g. movement controls within bantustans have forced some producers away from closer markets:
- h. the pursuit of self-sufficiency in bantustans has protected producers at the expense of consumers.
- 32. These Marketing Acts have not achieved their goal of encouraging efficient production, they have attained stable producer prices in some industries (but not income stabilization), they have been thwarted in achieving fair and equal access for as many producers as possible by their own biases towards commercial farmers, and by other discriminatory legislation, and they have not been very successful in promoting demand and consumption. Rather, marketing margins have widened, farmers have captured less of them, and the Acts have provided disincentives for competition (and therefore disincentives for efficiencies in marketing). The current Act's provisions are in conflict with the changing balances of power between different categories of farmers, and between farmers and input suppliers, processors and consumers, implicit in the legal and political changes taking place in South Africa.

Recent Changes in the Policy Environment

- 33. Triggered by the need to control budgetary costs, curb adverse monetary effects, pressures from unhappy commercial farmers and industrial interests, successful legal challenges to some board activities, increased parallel marketing, poor agricultural performance, and poor performance of controlled compared with uncontrolled commodities, there have been a series of changes during the 1980s in policies which have affected agricultural production and marketing. Among these have been:
 - a. tightened monetary policy, increased interest rates, and devaluation of the currency;
 - b. abolition of two control schemes (banana and karakul), and some deregulation in others;
 - c. a reduction of the number of commodities subject to price controls:
 - d. a shift from cost-plus to market-based pricing systems (maize, winter cereals, fruits, eggs, dairy products);
 - e. replacement of quantitative external trade controls with tariffs;
 - f. a comprehensive proposal has been prepared for presentation to the General Agreement on Tariffs and Trade (GATT);

- g. removal of subsidies (bread, maize production, and accelerated tax depreciation for capital items; on the other hand, debt write-offs to farmers and cooperatives amounting to R3.4 billion took place in 1992/93);
- h. reforms to cooperatives increasing the business they can do with non-members from 5% to 49% of their total and strengthening the relationship between the amount of business done by individual farmers and their voting power;
- i. bantustan reform including limited deregulation, and some successful legal challenges to levies by RSA boards on bantustan producers selling outside bantustan areas.

Impacts of Policy Changes

- 34. Recognizing the nature of the enormous distortions inherent in the previous policy framework, the recent changes in the rural sector sought to reduce the protection enjoyed by selected groups and move in the direction of fiscally sustainable policies. The observed impacts outlined below have arisen from four different sources and the interaction among these: (i) the reduced protection for selected groups; (ii) more general changes in the macroeconomy; (iii) the drought; and (iv) an incomplete process of policy reform whose benefits to the agricultural economy have yet to be realized fully. The main impacts so far are:
 - a. agricultural producer prices have fallen relative to consumer prices, producer prices in other sectors, and prices of agricultural inputs;
 - b. margins between producer and consumer prices have widened, leading to an increase in consumer food prices of 163% from 1985 to 1991, ahead of all consumer prices (135%); these changes were attributed mainly to wage inflation and declining productivity in food manufacture; some widening of margins arose from abolition of subsidies, and the imposition of VAT contributed to price increases;
 - c. protection for import substituting products has fallen;
 - d. there has been a sharp decline in real land prices, mainly in the summer rainfall areas, reflecting falling product prices;
 - e. there was a severe debt crisis between 1983 and 1985 arising from falling prices, rising interest rates and drought, eased by debt write-offs under the 1992 drought relief program, but still severe in summer grain areas where producer prices are still depressed;
 - f. a sharp reduction in investment took place, to 75% of its 1966 level by 1987, recovering slightly since;
 - g. farmers have moved away from capital intensive methods, though labor use remains suboptimal:

- h. the rate of growth of agricultural factor productivity has increased;
- i. the area under maize has decreased, with return of marginal land to pasture, field crop production has remained constant, horticultural production increased by 25% from 1985-1991, and livestock production by 15%.

Goals for Agricultural Marketing Arrangements in the Future

- 35. Recognizing that the process of policy reform in agriculture remains incomplete, it is useful to be clear about the desired goals for future policy changes.
 - a. Encourage competition in order to create space for new marketing entrepreneurs, create employment, reduce marketing costs and margins, and where possible raise producer prices while lowering consumer prices.
 - b. Ensure smallholders access to markets so that beneficiaries of land reform are not constrained by the marketing system in making good incomes from the land they receive, and sustaining those incomes.
 - c. Keep real food prices low in order to support employment-intensive economic growth by allowing the possibility for real wages to rise without raising nominal wage levels, thus increasing the competitiveness of all sectors of the economy.
 - d. Improve household food security in order to reduce malnutrition.
 - e. Maintain consistent, clear signals in order to encourage development of a full service private sector trade offering arbitrage over both space and time, and responsive to the needs of both consumers and producers of agricultural commodities;
 - f. Foster efficient production in order to make the most of comparative advantage in production of food, and agricultural products which are raw materials for processing and manufacturing.
 - g. Foster good management of natural resources in order to ensure that production is sustainable, and prevent environmental degradation.

Key Issues for Agricultural Marketing Policy

36. There are two broad directions government policy could take in attempting to reach the above goals. It could reverse the recent direction of policy change and restore a highly controlled framework with a large direct role for the public sector. Alternatively, it could complete the process of change already begun and move toward a framework of minimum controls with a larger direct role for the private sector. The latter option, which would seek to gain as much efficiency as possible from competition, would not, however, imply the absence of a policy and regulatory framework. The process of moving toward this option would be better called "re-regulation" than "de-regulation" since it calls for a more

subtle and skilled role for the public sector in order for it to work well. This section discusses seven general marketing issues, each of which could be approached from one or other of the two broad directions described above. The issues are: macroeconomic policy, marketing controls (to what degree to retain the statutory marketing system), food security, food reserves, import policy, export policy, and marketing institutions. The subsequent section illustrates these general issues with specific proposals for four commodity areas - maize, red meat, vegetables, and sugar cane.

Macroeconomic Policy

37. This area of policy is as important as sectoral policy in determining the incentives facing agriculture, and supporting transformation of the sector. The exchange rate is especially critical. Real exchange rate appreciation, which underprices imports and discriminates against exports, should be avoided, and any reduction in protection for agricultural outputs needs to be coordinated with comparable reductions of protection for other sectors, so that agriculture is not caught between lower prices for its outputs and higher prices for its inputs from other sectors (especially the industrial sector). Whether a controlled or a liberalized marketing system is chosen, as large a proportion of any gains from domestic currency depreciation should be passed on to agricultural producers. Experience suggests that the lower margins in a competitive marketing system allow a higher proportion to be passed to producers. Reforms need to be seen as credible and not subject to reversal; in this regard, gradual, phased reform may be perceived as more likely to be pushed off course than rapid reform. If the liberalized marketing system is chosen, competition policy should focus on reducing barriers to new entrants, and regulating monopolies. Marketing systems are likely to be able to adjust rapidly where there is adequate infrastructure, a strong private sector, and a sophisticated financial system.

Marketing Controls

38. It would be possible to return to a highly controlled system, similar to that South Africa had in the past, while attempting to re-direct it towards the needs of existing smaller farmers, and beneficiaries of a land reform program. By direct intervention the state could attempt to ensure smallholder access to marketing services, subsidize producers in selected areas by taxing those in others, and maintain accurate information about production and stocks of key food commodities. Such an approach would, however, give rise to distortions similar to those that arose in the past. The fact that these were directed towards a different set of beneficiaries than in the past would not reduce their effect in lowering the efficiency of the system. A highly controlled system would have the following drawbacks (many of which are drawn from experience with state intervention in other countries): (i) increased marketing costs and margins; (ii) tendency towards fiscal unsustainability leading to deterioration of services to smallholders; (iii) difficulty in maintaining controls and preventing attempts to bypass them; (iv) a tendency for emergence of patronage, lobbying and rent-seeking; (v) a tendency for benefits to be captured by larger or more politically influential participants; (vi) inability to take advantage of entrepreneurship and employment creation in marketing; and (vii) taxation of commodities is less effective than more general income or wealth taxes.

Food Security

39. The controlled system of the past, which maintained domestic prices for basic foodgrains above

international levels, did achieve a measure of apparent food self-sufficiency for South Africa, albeit at considerable cost to many low income consumers, whose food security has clearly not been attained. In other words, there was enough food available to meet apparent demand, but many poorer consumers could not afford to buy as much food as they needed at the prevailing prices, and therefore suffered from undernutrition. It would be possible in principle to continue to control producer prices at higher levels than justified by the market, attempt to maintain stable prices and constrain monopolies through price controls, and try to meet the needs of the large number of low income consumers through subsidies. This would require continuing substantial state intervention in the marketing system. The drawbacks to this approach are:

- a. the most important goal of food security policy is ensuring universal adequate purchasing power to meet basic food requirements; the main sources of increases in purchasing power for the poor will be a dynamic agriculture with economic growth and employment linkages which will raise incomes as rapidly and widely as possible; such a dynamic agriculture is unlikely to emerge in the context of highly controlled, interventionist marketing policies;
- b. restricting competition does not allow efficiencies in marketing to be exploited in the cause of lowering real food prices throughout the economy;
- c. systems of general subsidies are subject to substantial leakages and are high cost ways to reach their intended beneficiaries;
- d. price controls which do not reflect underlying market conditions, are hard to enforce, and require costly administrative methods of rationing supplies; and
- e. downward pressure on consumer prices is better maintained by continuous improvement of agricultural technology, competition to reduce marketing margins, and liberalization of imports.
- 40. For those groups which remain outside the reach of growth in the economy, other options which need to be considered include minimum income and employment guarantees, a public works program, and closely targeted income transfers or food subsidies. Although the implementation of such programs can be contracted to the private sector or NGOs, there is a critical role for the state in establishing them, as there is in setting up an early warning system to gain a head start on drought situations.

Food Reserves

41. South Africa has well-developed ports and domestic transportation facilities and ready access to world food markets in times of shortage. There is, therefore, no general case for holding strategic food reserves, which in any case are rarely maintained except at considerable cost. Nor is there any general case to be made for storage operations by the state. White maize is not supplied reliably by the world market and there may be a case for retaining surpluses of white maize rather than exporting them, if there is the likelihood of imports being needed in the following season. There is evidence, however, of willingness to substitute yellow maize in consumption if necessary, and steps to develop full private sector

arbitrage over space and time should result in stocks being held by the private trade if such activity is perceived to be profitable. This does imply allowing sufficient fluctuations in price to generate normal profits for short, medium and long-term storage. If any reserve stocks are deemed to be needed, they can be contracted to private sector agents and cooperatives, whose storage costs are likely to be lower than those of public agencies. There remains an important role for the state in ensuring the availability of information about production and stocks (which can be done effectively without direct participation in marketing activities), and maintaining an early warning system to detect developing shortages of staple foods. A combination of good agro-meteorological analysis, monitoring of price movements, and information about shifts in labor markets provides good indicators of developing problems and allows responsive actions to be taken.

Import Policy 7

- 42. The choice between controlled and liberalized marketing also raises the question of the extent to which domestic markets should be protected from international competition. It is likely that under current production systems, South Africa does not have a comparative advantage in producing staple foodgrains. Prices for such staples imported from the world market are, in general, lower than those maintained domestically. World market prices for wheat, meat, milk and sugar (and to some extent coarse grains) are held down in part by distorted policies maintained by the industrial countries. To the extent that these distortions are reduced (for example as a result of multilateral trade negotiations), world market prices may trend upwards, but this is unlikely to happen rapidly. Furthermore, continuing improvements in production technology throughout the world will continue to exert downward pressure on world prices in real terms. Under these conditions there is considerable scope for South Africa to use imports to manage consumer prices for basic foods within acceptable limits. While this appears on the surface to require considerable state intervention, and could in fact be managed through quantitative controls on imports, it also could be handled substantially through market mechanisms. The following considerations are relevant:
 - a. if imports were liberalized, care would be needed to prevent over-valuation of the domestic currency, which would undercut the ability of domestic producers to compete with imports;
 - b. market mechanisms, such as the futures and options contracts already in use by the Maize and Wheat Boards, could be employed to reduce exposure to world price fluctuations;
 - c. quantitative trade controls to gain further leverage over price fluctuations would have the disadvantage for South Africa of cutting it off from participation in international trade agreements; using variable tariffs or the new GATT safeguard rules to establish upper and lower bounds for domestic prices for a very small number of products (e.g. maize, dairy products and sugar) would also be preferable to attempting to attain price stability through domestic market control; the tariff mechanism would be constrained somewhat by GATT regulations, but it appears that the tariff movements needed would be well within the limits likely under GATT;
 - d. if agricultural output marketing were liberalized, it would need to be accompanied by

measures to relieve farmers of the burden imposed by protection of the agricultural input supply industries; if that protection must be maintained, it might be provided through direct subsidies rather than tariffs or quantitative trade restrictions.

Export Policy

43. Some of South Africa's agricultural exports (especially deciduous and citrus fruits) are controlled, on grounds that uncoordinated exports through multiple channels may lower returns to all exporters because they compete with each other, or that single channel systems are necessary to maintain brand and quality images and allow market promotion by an industry without concern about "free-rider" problems. The studies underpinning this report conclude that quality standards can be maintained by regulation, without running the risk of the efficiency losses which may be associated with single channel marketing; those studies recommend removing the single channel systems, pointing out that some sub-tropical fruits are already exported successfully without such controls; statutory single channel schemes could be replaced by export licensing as a temporary measure on the way to complete liberalization. Levies on exports could be used to finance market promotion, and quality control to meet environmental and market requirements.

Marketing Institutions

- 44. Small and medium scale trading activities are relatively underdeveloped, since the current marketing institutions were designed to favor large commercial farms. The institutional structure of marketing needs to be re-designed to serve the needs of smallholder producers and low income consumers. Among other things, the following need to be considered:
 - a. a more democratic, accountable representation of interests is needed than is possible with the current control boards and cooperatives; the current National Marketing Council and Agricultural Reference Board could be replaced by an Agricultural Marketing Council (AMC) with representation of all farmers, consumers, commerce and industry, the State, and independent experts; it could negotiate within itself the exact structure of representation, which would be a salutory process; it would advise the Minister on all matters having to do with agricultural marketing, in close liaison with the Board of Tariffs and Trade, the Competition Board, the National Manpower Commission, the National Economic Forum and the Economic Advisory Council; [Other options for managing marketing policy currently being discussed are: (i) retaining functions within a unified Ministry of Agriculture; and (ii) a Market Development Bureau which would manage marketing policy and projects, monitoring and advisory functions under contract];
 - b. following re-incorporation of the bantustans, there will be a need to rapidly unify marketing systems while preserving the more liberal elements of bantustan systems, and leaving enough flexibility to allow developments appropriate to local circumstances; the current marketing legislation, which institutionalizes statutory controls and lobbying for protection, is not as likely to achieve these ends as new legislation which allows the government to support the development of marketing services through affirmative action, retain regulatory powers for emergency use, and emphasize the promotion of competition

: :

by outlawing anti-competitive practices;

- c. statutory levies such as those that currently support the SAAU and its affiliates are likely to be a constraint on effectiveness of a liberalized marketing system; it would be preferable that funding of farmer representative bodies take place on a voluntary basis; levies might be considered for funding agricultural and market research;
- d. within a liberalized system, control boards could be re-constituted as voluntary producer associations, with specific support provided to small farmer associations to improve their bargaining power, allow them to take collective action, and enable them to participate in market based mechanisms to reduce price risks (futures and options contracts); this course of action envisages that with the development of dynamic private sector marketing, competition would limit the practice of discriminatory behavior by any marketing agency, be it a voluntary producer association or commercial enterprise; [Another Option: the successful incorporation of smallholders in commercial sugar production has relied substantially on statutory control to practice price discrimination in favor of smaller producers, and protection from imports to raise prices, but this industry has also relied on local monopoly in processing facilities, and the import protection it enjoys has raised consumer prices; it may be necessary in the future to change both of these features, in the interest of developing a more competitive sugar industry];
- cooperative membership may become less open under the current legislation, with the e. disadvantage that these cooperatives might thereby obtain excessive marketing power; this could be prevented by fostering alternative marketing channels; over time, the expected rise in purchasing power of smallholders would provide financial incentives for the larger cooperatives to extend services to the smaller farmers; during the transition, no cooperatives or private organizations should receive any particular privileges, such as preferential credit access, debt guarantees and write-offs, financial support for amalgamation, or exclusive agency rights under statute; cooperatives would, however, be eligible for assistance in developing plans for improving smallholder access to their services, and for smallholder agricultural development; there will remain a need to support rehabilitation of cooperatives in the former bantustans, and determine how cooperatives might serve resettled farmers following land reform; the message here for state intervention is a mixture of planning, affirmative action, and a light regulatory hand to get the most out of the potential of cooperatives, which experience shows everywhere function best when they are truly voluntary associations;
- f. in support of the development of small-scale, competitive marketing, an active competition policy would need to engage in a deliberate process of "re-regulation": reviewing existing legislation and local by-laws to remove discriminatory restrictions, reducing regulations as much as possible towards minimum health and hygiene requirements, and making provisions for controlling monopolies and other restrictive practices; a focus on provision of resources and advisory services to small-scale enterprises would be preferable to regulations beyond the minimum areas;

- g. a case can be made for some government intervention, on a transitional basis, in: (i) citrus, deciduous fruit, and wine (export only), to allow an export levy to be introduced to finance market promotion, and environment and market quality standards; (ii) maize, because of its critical importance for food security; (iii) red meat, because of its enormous problems of concentration at many stages of the marketing chain; and (iv) sugar, because of large price fluctuations in severely distorted world markets, and strong monopoly elements in existing marketing arrangements; however, even with these commodities, important steps are called for to promote emergence of a more competitive and diverse marketing system; among other things this includes urgent abolition of unitary pricing and single channel marketing, especially for maize and wheat, tariffication of imports, and eventual conversion of boards into voluntary producer associations;
- h. for other commodities, producer organizations could rapidly take over from statutory boards if the latter were abolished; this observation applies specifically to bananas, barley, canning fruit, chicory, cotton, dairy products, dry beans, dried fruit, eggs, fresh produce, grain sorghum, lucerne seed, mohair, oats, oilseeds, ostrich, potatoes, poultry, rooibos tea, and tobacco.

Marketing Policies for Selected Agricultural Outputs

- 45. The preceding discussion has examined principles of agricultural marketing reform. In order to give these principles more meaning, it is useful to apply them to the case of four commodities. In this way, it is possible to demonstrate liberalization and the caveats needed to support it.
- 46. <u>Maize</u>. Since maize is the most important field crop in South Africa (occupying 44% of the cultivated area, and providing 40% by value of all field crops and 13% of the value of all agricultural output in 1990/91), the staple food for the majority of the population, the most important intermediate input into the livestock industry (59% of the 6.4 million tons of commercial livestock feed in 1990/91), and the South African maize industry supplies most of the needs of Botswana, Lesotho, Swaziland and Namibia, reforms to the marketing of maize must be carried out with care to ensure positive results in all these areas of use, and cause no disruption to supplies. Furthermore, changes in maize marketing will affect fundamentally the marketing systems for wheat and oilseeds, since control over silos is the basis for the single channel marketing for all three commodities.
- 47. Although the common view is that the maize marketing system itself has not discriminated against small scale, black producers and processors, the following barriers to entry, or limits on participation may exist because of certain features of the present marketing system: all Maize Board members are white, and large commercial farmers have the controlling vote through NAMPO (8 of 13 Board members); small black commercial farmers also have limited representation in the National Association of Maize Millers, and the Associations of Grain and Produce Traders, Feedlots, Poultry, and Animal Feed Manufacturers; pan-territorial pricing does not allow smallholders to take advantage of better selling prospects; farmers who mill their own maize are not allowed to sell it without paying the Board levy, nor are they allowed to use services of the Board (other than for marketing) without levy; producers and processors are prevented from direct negotiation about quality based on appropriate local standards; the storage infrastructure is not suitable to the small producer who delivers maize in bags, and storage silos are not

located well for many small farmers; there is not free movement of maize within the southern Africa region, and excessive levies discourage such movement; small scale traders are locked out by the single channel marketing system; the Maize Board applies the same regulations for registration, packing, and quality specifications to all processors, large or small; and new entrants find it difficult to gain access to market information in a system designed for large commercial establishments.

- 48. Following are proposals for changing the maize marketing system to increase accessibility for small farmers, traders and processors:
 - a. the Maize Board would be replaced by a new Maize Board, representing all interest groups, charged with implementing minimum grading regulations, operating a GATT safeguard variable levy or floor price system as buyer of last resort and selling on a commercial basis, coordinating any strategic reserves deemed necessary (through contract arrangements), removing surplus for export (paid for by a levy on commercial processors), supplying market information to the entire maize industry, engaging in affirmative action to assist small processors and ensure storage facilities for small producers;
 - b. domestic maize prices would be determined by international prices, with quantitative import controls abolished and an appropriate tariff on imports where necessary; the Maize Board would no longer be the sole importer;
 - c. producers would be able to sell their maize as they saw fit, and cooperatives would be allowed to market maize on behalf of their members in all areas, including carrying over maize from year to year if they saw an advantage in so doing;
 - d. owners of silos (including cooperatives) would manage silos on their own behalf, on a commercial basis;
 - e. prices everywhere would be determined by regional supply and demand factors, with imports as a supply factor, especially in coastal areas;
 - f. grading standards and packaging requirements would be reviewed with the aim of making any changes needed to assist small producers and processors; and
 - g. appropriate research, extension, information services and training would be extended to small scale farmers, processors and traders.
- 49. Red Meat. Livestock and related products contributed over 45% of the value of agricultural output in 1990, with red meat alone contributing around 17%, including an offtake of over 2 million head per year from a national commercial cattle herd of about 10 million, plus additional offtake from national totals of 30 million sheep, 2.5 million goats, and 1 million pigs. In spite of a recent decline in producer prices as farmers sold off stock during the drought, the producer's share in consumer prices fell from 62% in 1974 to 48% in 1990. Per capita consumption of red meat has fallen from about 40 kg in the mid-1950s to 25 kg in 1990.

50. Increases in the price of red meat relative to those for white meat (poultry) seem directly responsible for the decline in red meat consumption over the past 20 years. The market for red meat has been regulated by extensive and complicated system. with trading processing dominated by three large firms (in 1990, the top three firms appointed as abattoir agents held 84% of the market share cattle, and 94% for pigs, while in the abattoir industry itself, the top three firms held 88% of the market: processing, the top three firms held 67% of the market). There has been a dearth of processing and transport facilities in lower income areas of the country. The formal marketing system which has dominated by virtue of statute has not served well the needs of lower income consumers. and has resulted in pent up demand in many areas of the

Pertilizer Use

Pertilizer use in South Africs increased steadily from 1950 to 1980, when it peaked at about 3.3 million tons, or around 775,000 tons of nutrients. Since then fertilizer use has fallen significantly, to around 2 million tons, or 605,000 tons of nutrients in 1990. The overall fertilizer use figures disguise some changes in nutrient composition. Between 1950 and 1980, applications of nitrogen increased much more rapidly than those of phosphate and potash. As a result, the ratio of nitrogen to phosphate increased from 0.25:1 in 1950 to 3:1 in 1990. The decline in fertilizer use from 1980 to 1990 is antributed largely to declining profitability of maize, to which about 35% of the fertilizer sold is applied. During the decade of the 1980s, the real producer price of summer cereals (mainly maize) increased by 159%, while the real price of all fertilizers increased by 255%. The fertilizer subsidy was reduced to zero by 1989, but even in 1980 it was not large.

The fall in fertilizer consumption since 1980 resulted in the closure or merger of a number of companies, after the industry had been reportedly running at less than 50% of capacity. There are currently three major producing and retailing companies, and one company supplies over half of the market. Since 1980, price control and tarriff protection have also been reduced. All fertilizer products except ures can now be imported duty free, and without permits. Since 1989, ures has been protected by a duty. About 10% of fertilizer manufactured in South Africa is exported. One factor militating against exports, and raising problems in remoter parts of the domestic market, is that fertilizer manufactured domestically has a relatively low concentration of plant nutrients, which increases transport costs per unit of nutrient. Fertilizer production and sales are both concentrated in the Transvaal (roughly 38% of sales):

Prom international experience, the main reasons why small-scale farmers do not use enough fertilizer are:

- lack of knowledge about fertilizer, or about what kinds and amounts of fertilizer to use, and how and when to apply it;
- b. fertilizer use is not financially viable because of: high costs of getting it to fields (including unavailability in small enough packages), inadequate response from lower grade crop varieties or poor seeds, inadequate prices or late payments for crops, risk of crop loss from adverse weather, and inability to put together other elements of the package of inputs which would make the crop profitable (especially constraints on labor, or unavailability of other purchased inputs);
- unavailability of fertilizer at all within any reasonable radius (price "infinitely high"), or unavailability of the correct formulation of fertilizer;
- inability to raise sufficient funds to purchase fertilizer, either because of lack of access to credit, or lack of cash arising from late payments for crops.

The fertilizer market has become reasonably liberalized already in South Africa, and in principle, few of the problems just outlined could not be addressed and solved by the commercial market. The main requirements for change from the past would be a larger proportion of sales in smaller packages, a greater proportion of transactions taking place with groups of farmers, or through cooperatives, information going out to farmers (through literature or mass media) in all the main languages, and soil testing facilities re-oriented towards farmer groups. All of these could be handled by the commercial market. What will be outside the control of the fertilizer companies is ensuring access by smaller farms to other complementary inputs, and credit facilities. But the flow of information through the commercial sector could be supplemented by a good agricultural extension service which reaches smaller farmers.

country, as incomes have increased.

- 51. The product emerging from the formal market does not suit lower income consumer preferences concerning quality and standards, and the formal system does not accommodate the informal trading culture vis-a-vis trading volumes (small with rapid turnover), consumer purchase methods (by piece rather than by weight), profit margins, and barter methods. Greater risks in informal markets have resulted in few suppliers with subsequent high livestock costs. Analysis of beef markets showed that where access to facilities was severely restricted, producers reacted to neither price incentives nor ecological variables, resulting in overgrazing and degradation of the natural resource base. With limited access, producers reacted to ecological signals, and only with easy access did producers react to price as well.
- 52. The following proposals for changing the meat marketing system to increase accessibility for small farmers, traders and processors confirm and extend reforms already begun in 1993:
 - a. regulations would be retained concerning fair business practices, minimum product standards and hygiene standards, and consumer protection;
 - b. regulations would be abolished or changed concerning compulsory registration of producers and other participants, over-strict hygiene standards, restrictive abattoir and slaughtering standards, trading hours and locations, controlled areas, restrictions on movement of meat and livestock (other than for livestock health reasons), compulsory auctions and compulsory use of agency services, the grading system, permits and quotas for supply control, guaranteed prices (floor, basis and ceiling), restrictions on handling, selling and pricing offal, hides and skins, compulsory levies on producers and the trade;
 - c. the Meat Board would be substantially altered; four options are presented, with the proviso that whatever happens, certain features would need to be retained, including independent management, and important functions such as statistical and market information services, product research and promotion, market research, consumer training, and producer advisory and inspection services; any option chosen would need to address disposition of the Board's assets in buildings, equipment, employees, and expertise, as well as the stabilization funds belonging to producers; the four options are:

 (i) a full agency of government (e.g. under the Department of Agriculture) funded by the Treasury; (ii) an independent agency operating a voluntary actuarial price guarantee scheme on an insurance basis, and/or a livestock futures market; (iii) combination with all other deregulated control boards into a government market research and information agency; (iv) a private organization with no statutory or regulatory powers which would engage in trading, or provision of services, on a commercial basis;
 - d. the price discovery process based on compulsory auctions at controlled abattoirs would be replaced by a wider process which allows auctions by independent firms, individual negotiation, contracts or contract exchange (such as in a futures market), and pricing on a live-weight basis; a representative price for the livestock industry would be replaced by prices varying according to quality, quantity, time, place, price expectations and market anticipation;

- e. current price support schemes would be replaced by schemes in which producers would choose to participate or not; options include systems based on insurance, deficiency payments, and forward contracts;
- f. provision of price and other market information is very important for effective functioning of the market, and further study is needed to decide the best method of providing it in a free market:
- g. steps would be taken to improve the informal marketing system, increase linkages with formal markets, and make the entire market more accessible to small producers and processors; these would include establishing urban wholesale markets (including auctions), provision of stalls and shelters, water and sanitation, electricity, simple (possibly mobile) slaughter facilities, and education of informal traders about meat hygiene and treatment of animals.
- 53. <u>Vegetables</u>. The horticultural industry has a long history in South Africa, and has grown to contribute more than 20% of the gross value of agricultural production. Production of vegetables made up just over 9% of the value of agricultural output in 1990. During the 1985-1991 period, vegetable production has increased particularly rapidly, by 30% for the period. While the vegetable industry is relatively unregulated, and free of state aid, there are still improvements to be made in marketing to better serve the needs of smaller producers in lower income areas.
- 54. From the start, municipal produce markets have been local affairs, and each city has its own market by-laws. At present, about 64% of the value of fresh produce flows through 15 National Fresh Produce Markets (NFPMs) in Johannesburg, Cape Town, Durban, Pretoria, Port Elizabeth, Pietermaritzburg, Bloemfontein, East London, Kimberley, Klerksdorp, Uitenhage, Springs, Vereeniging, Welkom, and Witbank. Some 31% of the total value flows through direct wholesale and retail outlets (the canning industry and large chain stores purchasing directly from producers) and the informal sector, while only 5% is marketed directly to consumers. Growth of distribution through direct outlets has been more rapid than that through NFPMs in the last 15 years. The present NFPMs are attuned to the needs of more sophisticated producers and buyers. They hold little attraction for small producers in remoter areas because of high transport costs, difficulty for the producers to meet quality, grading and packaging standards, and lack of interest by the buying agents. There is similar lack of accessibility to wholesalers and chain store groups because they require large volumes and continuous supplies of high grade product.
- 55. The existing pricing and distribution systems for vegetables function very well as regards freedom from regulation and efficiency. Little needs to be changed about the broad marketing systems, but actions can be taken to improve the access of smaller producers. These include:
 - a. establishment of special facilities in the NFPMs for small producers, which would develop their ability to produce for the wider market eventually; this has already been tried with some success in Durban:
 - b. appointment of black salespersons by market agencies; this has already begun in Johannesburg;

- c. educational programs to teach principles of grading, standard packaging, and trade marks to small producers, along with provision of market information (prices, and quantities supplied and demanded);
- d. encouragement of cooperative arrangements which would help individual small producers meet the volume and continuity requirements of wholesalers and chain stores;
- e. encouragement of the development of local farmers' markets, which would remain unregulated;
- f. including marketing training for small producers in advice provided by extension services.
- 56. Sugar. The South African sugar industry comprises about 2,000 large individual cane farmers, and 43,500 small farmers supplying 16 sugar mills along the east coast and in the Natal midlands, extending into the Eastern Transvaal. Sugar cane occupies 5% of the total area under field crops and contributes almost 5% of the value of agricultural output. There has been considerable success in involving small producers. Smallholder production has quintupled in the past twenty years. Smallholders cultivated about 28% of the cane area in 1991/92, and produced about 10% of the cane, at yields approximately 35% of the national average of 51 tons per hectare.
- 57. The South African sugar industry is a joint venture between two equal partners, the South African Cane Growers Association and the South African Millers Association. The industry is governed by a separate Sugar Act, under which the South African Sugar Association (SASA) is financed by both growers and millers. SASA provides information, carries out certain marketing functions (especially relating to carryover stocks), and determines both the pool prices to producers for cane and the local selling price of sugar. Although the industry has statutory protection from international markets using a variable tariff mechanism, the domestic industry is highly competitive internationally, and its prospects are regarded as good, although world markets are highly volatile, and distorted by policies in higher income countries.
- 58. Through activities of the independent Small Grower Development Trust (SGDT), founded in early 1992 by initiative of the small growers themselves, and funded by the Financial Aid Fund (FAF), which provides credit for cultivation and cane establishment, small growers have access to the sugar industry's extensive infrastructure, research, technology and local and export marketing channels. Support is also provided by the KwaZulu and KaNgwane Government Departments of Agriculture and various milling companies. While the present marketing system has been successful in incorporating small growers, the industry is facing reductions in tariff protection under GATT arrangements, which will require it to become more efficient, and there is a need to increase the participation of small growers. There is a question about whether the industry should continue to be operated on a monopoly basis.
- 59. Two options are presented for the future:
 - a. the status quo, with increased efficiency and lower real domestic sugar prices driven by tariff reductions required by GATT, from 126% to 106% over six years from 1994; under this scenario the industry would probably become smaller, and more competitive globally;

- b. removing the statutory powers of SASA, in order to make it a voluntary organization, and encouraging the milling companies to compete for both local market and export share; under this scenario the industry would also be reduced in size, the domestic price of sugar would decline in real terms probably more than in the first option, while research and many services funded by the industry would be run on a user pays basis.
- 60. To increase shares of small growers in the industry, a number of actions would need to be taken, among which are: (i) redistribution to smallholders of sugar cane producing land, including that currently in miller cum planter (MCP) estate farms; (ii) developing a viable land rental market in traditional areas; (iii) upgrading research, extension, training and input supply for small growers to increase their yields; (iv) capacity building of rural communities and local government in sugar growing areas; and (v) upgrading infrastructure relating to roads, water, sanitation, energy and telecommunications.

Summary

61. The above discussion of agricultural pricing and marketing arrangements has addressed many issues, most importantly those related to ensuring good access to marketing facilities for the entire spectrum of farms that will emerge from the land reform process (in order to support that process), and providing an underpinning for employment-intensive economic growth by securing low food prices in real terms. The government could address problems of agricultural pricing and marketing through either a highly controlled policy framework with considerable state intervention, or by "re-regulating" in favor of a framework allowing the efficiencies of a private sector system to be exploited as much as possible. The discussion above presents the arguments for and against these two frameworks. Although it would be possible to attain a few of the desired goals through a controlled system, and somewhat more through some mixture of the two systems, this report clearly favors a decision to seek the wide range of benefits which could be realized from a framework of minimum controls with a large role for the private sector.

Land Reform in Kenya

The least reform experience of Kenya provides some leasure for South Africa because of the striking similarities between pre-reform Kenya and contemporary South Africa, including:

- a moisily segregated society in which Africans were prevented by law from farming in the ac-called. White Highlands, except as farm laborers;
- Africans were prohibited from cultivating specified crops and white agriculture was assisted by price supports, subsidies and the provision of infrastructure and support services;
- c. African lived in reserves that were overpopulated and overstocked and, as a result, servicementally depended;
- d. efforts to improve conditions in the African reserves were mainly aimed at freelily introducing soil and water conservation measures, destecking, and limited population resultineers in African reserves on marginal lands; and
- 6. the falters of efforts to address the basic problems of population growth, inadequate infrarercture and support services.

 After World War II. African discontent over land shorages and political disenfranchisement found expression in the Man insurrection. The response of the colonial government was twofield: It addressed the problem of accommis development in the African reserves and constitutional reforms to facilitate democratic representation.

In agriculture, the recommendations of the Royal East African Communion, 1953-55 were accepted and included tenure reforms and the removal of restrictions on crop cultivation; and the provision of agricultural support services and infrastructure. These concessions did not meet, however, the basic land lumger.

Moreover there were differences of opinion, among both the major African political parties and the whites on how this basic need for more land should be estimated. Opinions ranged from demands that stolen lands be returned without any compensation to a reliance on a gradual process in which marks forces alone should be allowed to work. During constitutional nepotiations that led to independence all parties agreed to a compromise under which the publicity operated "Million Acre Scheme" was adopted as the principal method of improving the availability of land for Africans.

Over a period of nearly 14 years, this scheme was responsible for the purchase of 1,325 farms, intalling about 770,000 has on which 66,319 families were settled. The distinguishing features of the various schemes were:

- the creation of an independent settlement authority that was solely responsible for settlement. Where other ministries intervened, or created their own schemes, these were unsuccessful;
- b. the suthority comprised seconded representatives of the main implementing ministries (Agriculture, Lands, Works);
- the settlement Authority had a time-bound mandate, with the goal of transferring its distinct to the Ministries normally entrusted with land management once its goal had been achieved;
- 4. there was a menu of options; a variety of schemes into which different types of settlers could be accommodated among the types were high density, low density, co-op, farms and ranches, and Assisted Owners;
- in government-assisted schemes, responsibility for selection of settlers according to agreed criteria was always given to
 the provincial administration where district selecting committees set under the chairmanship of the District Commissioner;
- f. the membership of the district selection committee usually comprised officials from the technical ministries and representatives of the local interest groups;
- g. however, once the senters were selected the entire process of settlement, demarcation of lands, provision of services and management was taken over by the settlement authority which coordinated the services of the line ministries in the settlement area.
- h. funding for the settlement program, in addition to what the Kenya government budgeted, was obtained, as grants or loans and in coordination from four major donors: the UK, the CDC, the West German government and the IBRD;
- i. most of the donor funds have been converted to grants;
- however, the administrative costs of the public sector programs, which all authorities concode has been excessive, have been estimated to equal 60% of the cost of land purchase

The individual and group purchase of lands continues. This program began as the Assisted Owners Scheme under which the settlement authority believed that land transfers could be accelerated by assisting sellers to nominate qualified purchasers who were able to raise at least 30 % of the total capital. The acheme was discontinued after 13 months when it was concluded that the wealthier farmers for whom the scheme was originally designed could take care of themselves and obtain assistance from the Land Bank. This market-based system, however, continues and has resulted in the transfer of a much larger area of lands than that comprised in the other government-sponsored schemes and at much lower cost. As of December 31, 1975—the latest date for which figures are available—the loan repsyment record of the Assisted Owners was the best. The government-sponsored program has stopped.

LAND REFORM: LESSONS FROM EXPERIENCE

- 62. As noted above, this report is concerned with the broad issues of rural restructuring and development, but with a special emphasis on the potential of smallholder agriculture and the changes necessary to achieve that potential. With this section, attention shifts from the broader policy issues affecting the sector to the specific issue of access to land. The view of this report is that greater reliance on smallholder production offers South Africa the opportunity of achieving significant gains in terms of social justice, employment, and agricultural potential. The central, but not exclusive ingredient in this strategy is a land reform process. The balance of this report is concerned with examining options for how that process might work in South Africa. As a starting point, the report briefly reviews lessons from international and South African experience.
- 63. Land reform programs have historically been associated with changes in political regimes. The most thorough and rapid programs have followed revolutions (e.g., China, Eastern Europe and Cuba) or occupation after military defeat (e.g., Japan, Taiwan and Korea). More benign land reform programs and ones with less fundamental changes have followed the end of colonial rule, the shift of power from an immigrant settler community or relatively peaceful ideological shifts (e.g., Algeria, Kenya, Zimbabwe, Bolivia and Mexico).

International Experience

- 64. The five salient lessons to emerge from international experiences in land reform are listed below:
 - The speed of implementation of the program. One characteristic of a successful program is rapid implementation. In the absence of fast paced programs, a combination of bureaucratic inertia, legal challenges, and the power of present landowners (generally the elite) is likely to render the program ineffective. An example of these delays and consequent frustration of the program is the Indian experience, where although the need for reform was constitutionally recognized, agriculture is a state not a national level subject. This gave rise to much legislation aimed at introducing land reform. Two common principles in the legislation were the transfer of title to tenants, and the redistribution of surplus lands above the ceilings permitted. Implementation was left to administrators. Apart from delays on account of legal challenges to the legislation, the elite were able to frustrate reform in two respects. First, in many instances, tenants were converted into contract laborers. Second, the limits on land ceilings were subverted by notional partitions of better lands among landowner families and the "surplus" available for distribution was mainly marginal lands. The intended beneficiaries therefore obtained less land than was estimated, it was of inferior quality, and, combined with delays in implementation, undermined the credibility and effectiveness of the program.
 - b. <u>Economic viability of the farm models</u>. Before a reform program is implemented, there must be a careful assessment of the models or livelihood options available to rural households. That is, the models should indicate whether the persons resettled on the land have sufficient land size and quality to provide at least the target income. Further, in

- computing the costs and benefits, other assistance and infrastructure necessary to generate the income should be planned.
- c. <u>Political acceptability and legitimacy of the program</u>. There must be a consensus of the wide spectrum of political opinion that the program is both necessary and the most acceptable way of achieving the program's explicit goals. Land reform programs are not irreversible, particularly where this consensus has not been achieved. Thus, for instance, in Chile, the overthrow of the Allende regime resulted in the re-introduction of the former skewed landownership patterns during the Pinochet regime.
- d. Clear definition of the role that the public sector can and should play. The proposed program must be evaluated in light of an understanding and acceptance of the roles that the public sector can and must play, and what should be best left to the non-governmental sector. Programs that have relied entirely on the public sector in the belief that the sector is the only one capable of maintaining integrity, delivering services, determining needs, and managing the process have been failures.
- e. <u>Land reform is only one part of a comprehensive program of economic reconstruction</u>. The redistribution of land is necessary, but not sufficient to guarantee the success of a development program. There is the need for additional services—infrastructure, markets, incentives, health—to be considered and access provided. These considerations are necessary both to sustain higher productivity consequent on reform and to include others who may not benefit from the direct provision of land.
- 65. South African experience in this area stems from a continuous legacy of displacement and resettlement of both its Black and White populations. The distinction, however, is that while resettlement measures have generally been of considerable benefit to Whites, they have resulted in extreme deprivation to Blacks.
- 66. These experiences may be reviewed in the context of three broad historical eras: (i) pre-1948; (ii) post-1948 to the mid-1970s when the Grand Apartheid Policy was stalled by the campaign in both townships and rural areas to achieve ungovernability; and (iii) the mid-1970s through the present, during which there has been a growing recognition of the need for basic structural changes in the South African economy.
- 67. During the period 1913 to 1948, resettlement schemes for Whites took a variety of forms, the most representative in terms of planning, facilities provided, and cost being the Relief Camps and the post-Boer War Land Settlement Scheme, the post-World War I Land Settlement Schemes, and the Valhaarts Irrigation Scheme. The first, hardly met its relief objectives. It was poorly situated to generate economic viability and was inadequately planned. However, experience from these provided important lessons for subsequent schemes: better planning, consistent farmer support (with the increasing provision of subsidies), and the provision of adequate land.
- 68. For Blacks, however, both the law and administration were bent to control, displace and reduce competition with White farmers while generating a supply of cheap labor for White farmers and the

mines. The process involved a progressive introduction of these restraints through the administrative measures in the Land Act, 1913, the consolidation of Labor Reserve Survey in the bantustans, the Group Areas Act, the suppression of Black agriculture and the introduction of Betterment Schemes (which, it is said, relocated more Blacks than even the 3.5 million estimated to have been resettled after 1948).

- 69. The lessons from experience with White resettlement schemes were not applied to Black schemes. The goals were mainly to remove Blacks under the guise of betterment, homogeneity, and the lower cost of delivery of services. In fact, the land allocated was both of variable quality and inadequate; and shortages of financial resources (which were not a consideration in White settlement schemes) provided the excuse for the reduced delivery of services, changes in programs and reductions in the program targets.
- 70. Between 1948 and the mid-1970s, resettlement/relocation programs were mainly confined to Blacks. These were the result of evictions or departures from White farms; relocations as a result of the Group Areas Act, 1950; urban relocation; and homeland consolidation and Black spot removals. The main destination areas were group area townships, relocation townships (established within the bantustans), closer settlements (with even fewer facilities than relocation townships) and Betterment settlements. The economic significance of the bantustans program has been described as the effort to create a labor reservoir and dumping ground for surplus Black labor. The other programs, however, were not very different in their consequences and share common characteristics: inadequate services, poor infrastructure, overcrowding, little land, and extreme poverty.
- 71. Experience in recent years (mid-1970s to the present) has included a mix of forced settlement programs determined and directed by the government and negotiated settlements relating to specific areas of land subject to the claims process.
- 72. The government directed programs could further complicate the restoration process envisaged. The negotiated cases provide an example of solutions determined with the participation of the affected communities which provide not only a sustainable land management system but are inclusive of a variety of interests and rights.

LAND REFORM: RESTORATION AND REDISTRIBUTION

73. In the context of a land reform or restitution program, there are three basic means for landless people to gain access to land in any country: (i) land invasion; (ii) restoration; and (iii) redistribution. Of these three broad mechanisms, this report advocates a combination of restoration and redistribution; however, it is recognized that where there is uncertainty about future access to land, invasion is often seen as the only option available to the landless population. This section examines each of these mechanisms and develops options that may be able to provide guidance to a South African government faced with the necessity of designing and implementing a land reform program.

Invasion

74. When people are not given access to land via either restoration or redistribution options, one alternative is land invasion. The process of land invasion would present a new South African government

with an exceedingly difficult problem. The credibility of existing legal institutions will have been undermined because of their inability to implement effectively the land restitution process. Consequently, people who have invaded land are unlikely to respond to court orders to vacate and forced evictions may become necessary. Given the recent history of South Africa, however, it is highly unlikely that a new government will be able to carry out such evictions without causing massive political alienation. Should the invasions not be reversed, the security of ownership rights will likely be undermined with adverse consequences for investment and growth.

- 75. Given the likely inability of a new government to undo land invasion, it is essential that an expeditious, transparent, and thorough land restoration and redistribution process be implemented as a means of discouraging the landless from resorting to land invasions. Although squatting and trespass will likely be decriminalized, landowners will continue to have remedies to protect their property rights. In the event of invasion, the landowner will retain rights to seek a court order requiring the squatters to vacate the property. Under these circumstances landowners would have the right to demand that a court order be implemented, failing which they may claim that the state had effectively confiscated their property and must pay compensation in accordance with the constitutional protection against expropriation without compensation. Invasion, therefore, will not usually result in lower fiscal cost of land acquisition than expropriation in public interest or purchase of land. However, decriminalization will make it necessary to develop additional disincentives to invasions that could include the denial of grants under the redistributive process to groups participating in invasions, once the restoration and redistribution programs are functioning.
- 76. An outstanding issue concerns the status of land invasions that occurred prior to the implementation of new programs. One option is to subject these invasions to judical review. If the invaded land is state land, the problems may be resolved through the fast-track procedure of administrative land allocation. However, if the invaded land is private property, the status may be resolved either through adjudication or alternatively the state may expropriate and offer compensation. However, the communities who have settled on land prior to the launching of the program will not be subject to the penalties envisaged against those who invade once the program is underway.

Restoration

- 77. The role of a land claims process in restructuring existing patterns of land occupation and use in South Africa will paradoxically be both limited and all important. It will interact closely with the broader process of rural restructuring and the land redistribution process. If the redistributive process is inadequate or too slow, people are likely to frame their needs in terms of claims, which could get bogged down in legal processes.
- 78. The land restoration (or land claims) process involves the return—by means of an administrative or adjudicative process—of specific parcels of land to individuals or communities who were unjustly removed in pursuance of racially based land legislation or policies. This process has the benefit of expediting the restoration of specific land; however, it raises important gender and class issues which will need to be addressed. Restoring the <u>status quo ante</u> could reimpose the original patterns of land holdings, including in some cases a partriarchical ownership structure to the exclusion of women and in some cases tenants.

Eligible Claimants

- *7*9. One option is that the claims qualifying for inclusion in the land claims process should only include those acts of dispossession that took place after 1913, when the Natives Land Act was enacted. Another possible date is 1948—the formal beginning of the apartheid era. In order to facilitate the process of recognizing and identifying claimants it is possible to define categories of removals which sought to further a particular apartheid ideology. These qualifying acts may be identified through the differentiation of four types of legal rules which characterized racial land law in the period since 1913: (i) Rules dividing the land surface into race zones; (ii) removal provisions implementing resettlement in terms of an apartheid legislative map, e.g., s5(1)(b) of the Native Administration Act 38 of 1927 and s46(2) of the Group Areas Act 36 of 1966; (iii) other removal provisions employed to achieve apartheid objectives eg. Prevention of Illegal Squatting Act, trespass, expropriation, slums acts etc; and (iv) provisions which had the effect of denying persons of a particular race group access to land in certain areas by criminalizing their "unlawful" presence e.g., pass laws.
- 80. Of these four types only the specific removal provisions implementing resettlement or employed to achieve apartheid objectives, categories two and three, would be deemed to be the basis of claims for lost land.

Should Victims of Apartheid Pay for Land?

Claimants in a restoration (or land claims) process should <u>not</u> be required to pay for land because they are regaining what rightfully belongs to them. Hence, it is only in the context of the land redistribution process that the question of payment by beneficiaries arises.

Exempting beneficiaries of the redistributive process from paying for some part of the land redistribution costs, while compensating the current owners and farm creditors for the land at market prices, implies that the state has to finance 100% of the land acquisition costsultimately out of tax revenues. This approach would appropriately impose the entire cost of land redistribution onto texpayers. However, excessive tax burdens have disincentive effects of their own, so there are clear limits to taxation, or else growth of the economy is slowed down. Given the large resource requirements for other social needs such as education, health and urban housing, redistributing land entirely on a grant basis would have the unavoidable consequences of either dramatically reducing the number of beneficiaries, or stretching out the program over several decades. Hence, for reasons of pace and extent of reform alone, some co-payment element seems appropriate.

- 81. Categorizing the rural claims that are likely to arise from these two sets of rules it is possible to identify four broad categories of rural forced removals to which restoration will apply: (i) "Black spot" removals; (ii) "Homeland" consolidation removals; (iii) Labor tenants and squatters; and (iv) betterment schemes.
 - i. "Black Spot" Removals. These were the removals of Blacks from pockets of Black-owned land (or land to which Blacks at least had legally recognized rights of some kind) which remained in the "non-Black" rural race zones after the coming into operation of the Native Land Act of 1913 and the Development Trust and Land Act of 1936. Since 1913, and particularly from the mid-1950s onwards, it was the policy of the South African government to force people living in these ares to move to one or more of the

governing areas or newly "independent" states. Given the clear statutory evidence available and more recent nature of these claims, they provide the clearest cases for unrestricted restoration.

- ii. Homeland Consolidation. Using the National States Constitution Act of 1971 and the Borders of Particular States Extension Act of 1980, the South African government, in cooperation with the national state or self-governing territory concerned, amended the borders of the various homelands so as to include areas previously excluded from the system. It thereafter became possible for the homeland governments concerned, both to ignore any registered rights that the affected communities might have had in respect of the land in question and to remove such people under the guise of privatization.
- Labor Tenants and Squatters. This class of persons poses difficult questions as to the appropriate form of redress which should be given. Most of the evictions of labor tenants took place under the provisions of Chapter IV of the Development Trust and Land Act, until the abolition of labor tenancy in 1979. After the repeal of Chapter IV in terms of the Abolition of Influx Control Act, No. 68 of 1986, a new section (Section 6F) was inserted into the Prevention of Illegal Squatting Act, providing for the ejection of persons occupying land outside the jurisdiction of a local authority, who were not employed by the owner or legal occupier of such land. There are several questions raised as to the nature of the property rights to be given to such labor tenants and what compensation if any that should be paid to the existing owner for the loss of part or all of their land.
- iv. Despite the questions, it is essential to recognize the birth right of longstanding land occupiers in the restoration process. Labor tenants and squatters who have suffered eviction will have a claim to restoration. However given the difficulties of determining the extent of such claims and the relationship between tenancy under Roman-Dutch law and birth right under indigenous conceptions of the land ethic, a number of remedies must be available to this group. First, if claimants wish to continue farming and are still resident or recently evicted, a portion of the farm may be awarded to them collectively. Second, if there is concern that restoration will lead to unresolvable conflict with the owners, claimants may obtain alternative land or monetary compensation. Finally, in cases where the evidence is inadequate to demonstrate a birth right to a particular portion of an existing farm, but the claimants want access to land, such claimants should be directed to the redistributive process, where they should be given priority.
- v. Betterment Planning. The policy of betterment planning, whereby many Black rural areas were completely restructured in a misguided attempt to promote agricultural production, was first introduced in 1939. In order to give effect to the policy, hundreds of thousands of people in the homelands were relocated from their dwellings to closer settlements, while arable land and commonage were arranged into larger, contiguous units. Very little compensation was paid. However, due to the extent of the claims and the potential for intra-community conflict, it would be advisable to direct claimants away from the restoration process to the redistribution process.

82. From the choice of particular apartheid rules and the intention to provide restitution for past discrimination, a valid limitation emerges. This is the exclusion of claims from landowners who may have been expropriated by this policy, but who are not members of communities who suffered legal discrimination under apartheid. Justification for this approach is based on the fact that White property owners were adequately compensated and furthermore had access to the political process denied the victims of apartheid.

Land Claims Forums and Process

- 83. A land claims body may act as an administrative tribunal, or as a court. Which it will be in South Africa will depend on how the constitution deals with the separation of powers. Since experience elsewhere emphasizes the need for a speedy process, one option would be to establish a commission which would decide in which category a claim falls. If the land concerned is owned by the state, the commission could make its own decision quickly (the fast-track approach), subject only to review by a land claims court. If the land concerned is privately owned, the commission could make a recommendation to a land claims court for its decision. The land claims court could thus focus on difficult cases on appeal, and speed up the whole process.
- 84. Because the majority of the claims are likely to be by groups or communities, it is necessary that a suitable form of class action be recognized. The existence of multiple claimants requires the establishment of clear notice requirements. Further given the nature of some of the claims, there will be the need to relax certain formal evidentiary rules, to enable the land claims court to obtain the information necessary to make its decisions. This may require some form of sliding scale of evidentiary burden, i.e., the older the case the greater the burden, so as to balance the uncertainty and lack of living witnesses, while for more recent cases there would be a lesser evidentiary burden. Closely related to this is the possible cut-off date of 1913. However, to avoid discrediting the process, it is important for the land claims court to have the power to relax this barrier, as a matter of equity, in cases of clear demonstrated injustice.

Redistribution

- 85. It is important at the outset that the reader understand what this section is intended to accomplish. The options and ideas put forward here should not be seen as prescriptions or a blueprint. Instead, they should be regarded as a <u>starting point and a set of tools</u> that can be useful in designing a program for redistributing land in South Africa. Although these options cover many aspects of land redistribution, they do not address all the questions that will need to be answered. For example, while it is recognized that in an environment of rising land prices speculators may try to enter the program, the report does not offer solutions to this problem.
- 86. The salient points that emerge from the options put forward in this section are that:
 - a. market-assisted land redistribution programs tend to perform better than those administered and operated by the public sector;
 - b. the role of the public sector in a land redistribution program centers on ensuring adequate

supplies of land in the market and monitoring the overall operation of the program;

- c. criteria for participation are necessary and must be discussed and agreed in advanced;
- d. welfare objectives can be met by including a grant component in the program;
- e. a matching grant scheme that forces participants to use some of their own resources in order to gain access to land will help to assist in self-selection of participants and encourage the productive use of land;
- f. the grant elements of the program are essential in order to accomplish a redistribution of assets and to ensure that beneficiaries emerge from the program with a net increase in their asset position and low debt/asset ratio as a means of ensuring viability and sustainability of their enterprises;
- g. in addition to addressing the fundamental issue of social justice, these options are likely to significantly increase net rural employment and ensure that the cost of the program is very reasonable;
- h. a redistribution program will not be able to provide land for everyone and the program will need to be complemented by a rural safety net and by programs for urban groups, and
- i. although the discussion concentrates on agriculture and small farmers these are not the limits of the program. It is envisioned that the program will be a vehicle for supporting a wide range of land use activities, including trading activities, and small-scale enterprises.
- 87. It is anticipated that in South Africa, the majority of land reform activities will occur under the heading of land redistribution rather than restoration. Models of land redistribution can be thought of as consisting of two stages—acquisition and distribution of land. The central issue in the way these two stages are implemented is the role of the public sector. Although there are numerous variations in the role that the public sector plays in these stages, it is possible to think of each stage as being either market-assisted or publicly administered. Figure 1 depicts the four general models of redistribution that emerge from this classification and some examples.

	Market-Assisted Acquisition	Administrative Acquisition
Market-Assisted Distribution	With both stages handled by market mechanisms, such as a willing-buyer, willing-seller model. The role of the state is limited to monitoring and facilitating the process.	In this case the state acquires the land (through expropriation or direct purchase) and relies on a market device for distribution, e.g., a bidding process.
Administrative Distribution	In this case, the state acquires land in the market and then administers the settlement program, e.g., homeland consolidation and betterment schemes.	An example of an administratively handled land redistribution is the process of directed resettlement on state owned or expropriated land.

Figure 1: Models of Land Redistribution

88. International and South African experience clearly indicates that the performance (as measured by pace and extent of land reform as well as the performance of settlers) of models that are dominated by the public sector—through various administrative devices such as centralized decision making—is typically unsatisfactory. In contrast, reliance on market forces improves the performance of the model, but requires government intervention or guidance to ensure that certain social objectives are achieved. The redistribution options described in this report (for both the acquisition and distribution stages) rely on market mechanisms, combined with a recognition of the need for government to ensure that the broader social objectives of the land redistribution program are achieved.

Options for Redistribution

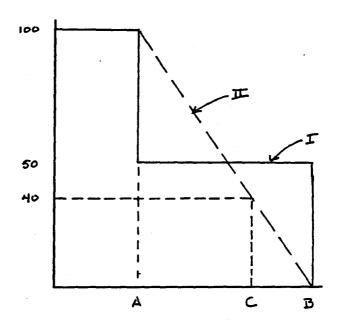
- 89. Apart from the role of the public sector in land reform, one of the central tensions in designing a land redistribution model is that between the <u>desire to address welfare and asset transfer objectives</u> through the redistribution of land (essentially transferring an asset) and the <u>desire to promote the productive use of land</u>. Some individuals who qualify for land or assistance under welfare objectives of a program, may have little experience in agriculture. In contrast, the most experienced and well-qualified farmers are unlikely to qualify to receive land under welfare objectives. Some redistribution models have taken the view that those individuals qualifying under welfare guidelines will acquire the necessary farming skills, but because of the time required for such skill acquisition, this approach is more costly. This difficulty should <u>not</u>, however, be cause for sacrificing welfare and asset redistribution objectives in a land redistribution program.
- 90. To the extent that a South African land redistribution program wishes to address welfare objectives, one option is for the land redistribution program to include a basic grant. The basic grant would be available to all individuals who meet the requirements for participation in the redistribution program. The size of the individual grants would be determined largely by budgetary considerations and the needs of the participants, but would likely be sufficient to pay for a rural housing site. In the context of rural restructuring, a basic grant scheme would provide the new South African government with a very flexible tool. If the new government opts for a large welfare (grant) component to the land redistribution program, the size of the basic grant could be increased—subject to budget constraints—thereby allowing

grant recipients access to more land. For such a basic grant scheme to operate effectively, the government will need to ensure that the land market provides opportunities for beneficiaries to gain access to land. Options for the government to fulfill this responsibility are described below.

- 91. In order to support increased access to land by individuals or groups that will use land for production a matching grant option can be added to the program. Under this option the individual or group that wishes to gain access to land (through purchase or lease arrangements) would provide a portion of the purchase price as would the redistribution program. Therefore, the resources for the purchase (or lease) price of the land would consist of a matching grant from the government—which can be separated or combined with the pure grant component discussed above—and the beneficiaries' co-payment. The size of the matching grant could be designed in several ways; however, it is assumed that the higher the value of land the smaller the matching grant share. (In terms of Figure 1, this option corresponds to relying on market-assisted devices for both acquisition and distribution.)
- 92. An example of how the matching grant option would work is provided in Figure 2. Any purchase of land up to the value of point A would be entirely paid for by a grant (i.e., 100% grant financing). In designing the program, the value of point A would be determined largely by budgetary considerations. Referring to line I—which provides a 50% subsidy above the basic grant—in Figure 2, any purchase of land between points A and B would receive the basic grant (point A) plus 50% of the additional land value. For example, if A = R5,000 and B = R20,000 and an individual or group wanted to purchase a piece of land valued at R17,000, the total grant available to the individual would be R11,000 (R5,000 + (.5)R12,000). An alternative formulation of the grant function (line II) provides a decreasing subsidy as the value of land to be purchased increases. For example, referring to line II, if an individual wishes to purchase a piece of land valued at R16,000 (point C), the total grant available to the individual would be R9,400 (R5000 + (.4)R11,000).
- 93. Apart from budgetary considerations, there are other advantages and disadvantages associated with a matching grant or co-payment requirement. Among the advantages are the following: (i) co-payment acts as a self-selection or rationing device and reduces frivolous requests for land from people who are not really interested in living in rural areas or operating a farm; (ii) co-payment increases the incentives for using land in a productive and sustainable manner; (iii) co-payment may encourage prudent thrift and capital accumulation among the beneficiaries, and familiarity with financial instruments; and (iv) co-payment makes it less attractive for the wealthy to claim land, especially if the co-payment requirements increase progressively with the amount of land claimed. Therefore the program will have much fewer built in incentives for arbitrary allocations of the land or corruption.

Figure 2: A Grant Function Based on Land Value

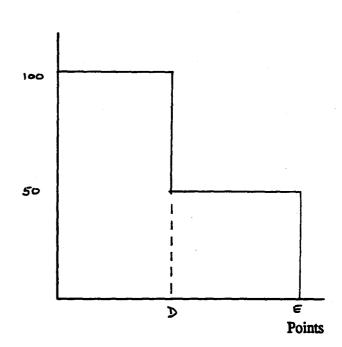
Share of Purchase Price in Grant Form



Land Value

Figure 3: A Grant Function Based on Points Criteria

Share of Purchase Price in Grant Form



- 94. At the same time, however, a matching grant scheme has disadvantages. First, such a requirement may be inconsistent with the prevailing ideology that the right to land for purposes of shelter and food production should be free, especially in view of past abuses in South Africa. Second, if a co-payment is required, low income individuals and households are likely to be excluded from the program, thereby subjecting the program to charges of elitism. Clearly these disadvantages center on the tension between the welfare objectives and the desire to have land used productively. It is for this reason that the options presented in this report are based on two components-basic grants and co-payments. This approach allows some land to be available (through the grant component) for housing (or other uses) even if the beneficiary is unable to participate to the co-payment component of the program. Any additional access to land through the redistribution program would require a co-payment. Within this context, government would have the option to make the program more equitable, and to reduce the incentives for corruption, by placing a ceiling on the size of the government's co-payment. In order to further reduce the burden of co-payment requirements of the program, poor beneficiaries might also be allowed to pay for their co-payment portion in kind, i.e., in the form of labor or materials for the construction of the basic infrastructure which would be part of the program.
- 95. Another question that needs to be considered is who will receive the matching grants and how much land (or grant value) will they receive? International experience clearly indicates that the characteristics of those who participate in a land redistribution program is an important factor in determining the success or failure of the program. In the context of a land redistribution program, there are two broad methods for determining who will participate in the program: (i) self-selection; and (ii) criteria based on certain characteristics of the beneficiaries. These two methods can operate individually or they can be combined in a variety of ways. The basic self-selection model is one in which any individual or group could participate in the program. (Even in this option some simple criteria would likely be applied, e.g., participants need to be historically disadvantaged and South African citizens.) In terms of the matching grant model discussed above, an individual or group would have their contribution to the purchase price of the land automatically matched in accordance with the particular copayment or grant function selected for the program. For example, an individual (or group) wishing to purchase a piece of land would compute the value of the matching grant they were eligible for (typically based on the value of land) and their required payment. Once their required payment was deposited in an escrow account and their application to the program was validated, the matching component would be deposited in the same escrow account. The account could then only be used for a land purchase.
- 96. The application of criteria to the program simply means that individuals or groups need to be certified as having the necessary qualifying characteristics before being allowed to participate in the program. For example, points could be assigned for various characteristics that are judged to be desirable, e.g., relevant experience, social circumstances, and/or gender. On the basis of total points, an individual (or group) would qualify for a particular level of grant financing. In Figure 3, an individual or group receiving more points (reflecting the characteristics valued by the program) would be eligible for a higher share of grant up to some limit, say 50% (or 100% if a full grant component was judged necessary for the program). The example shown in Figure 3 would have the characteristics that individuals with points less than level D would receive the land on a grant basis, while individuals with more points would obtain a grant, but with a copayment requirement. No additional grant would be provided to individuals with a very large number of points above point E.

97. A variation of the points system could involve qualifying individuals with certain characteristics, e.g., tenants, landless people, or victims of betterment planning, for immediate participation in the program. Alternatively, criteria could be based in large measure on means testing. In such an option, it needs to be stressed that decisions regarding who participates in a land redistribution program must be accepted by society in order for the program as a whole to have credibility.

Ensuring the Availability of Land

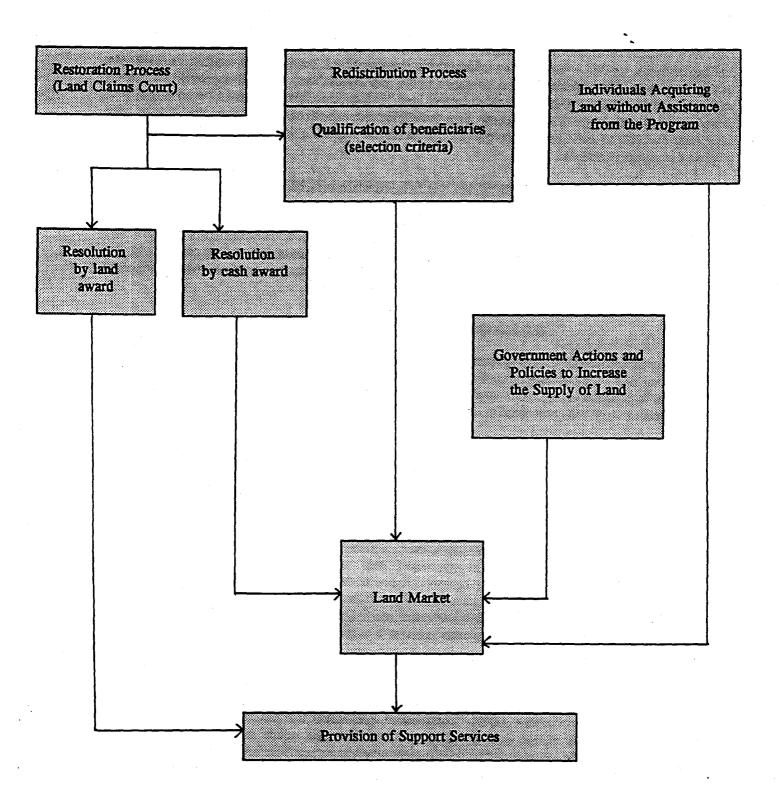
- 98. As stated earlier, a central theme of the land redistribution options described in this report is a reliance on market forces for facilitating both the acquisition and redistribution of land (Figure 1). At the same time, it is recognized that the government must accept ultimate responsibility for ensuring the success of the redistribution program. A critical requirement for a market assisted redistribution program is the assurance that sufficient land will come on the market and that land prices will not be driven up beyond levels that correspond to the productivity and profit potential of the land. Among the options for achieving these objectives are the following:
 - a. Elimination of policies and programs that favor large scale agriculture will reduce the land price which is simply a capitalization of these privileges into the land price. Much of this has already happened over the last few years and has contributed to the decline in real land prices.
 - b. State land can be either sold or directly provided to particularly needy beneficiary groups such as former labor tenants or victims of dislocation associated with betterment schemes. Sale of state land will increase the supply of land, while direct distribution will reduce demand for land by beneficiaries. Since low quality land is unsuitable for direct settlement, only the unoccupied, high quality, state-owned land should be used for direct distribution. The remaining land can be sold, with the profit going to purchase more appropriate land. Of the total amount of state owned land, it is estimated that only about 600,000 hectares is suitable for crop production of which only about 320,000 hectares is unoccupied.
 - c. If land supply is still a problem, another option would be to encourage—through a variety of means—land owners to sell their land. For example, what amounts to a pension scheme (based on the net worth of the farm) could be designed that would provide current owners with a secure income stream based on the net worth of their farms. If the current owners perceive the pensions as providing a secure income stream, rather than risky farm profits, they are likely to be willing to sell the land for a present value of pension benefits which is lower than the market price of the land. The pension scheme has the additional advantage that it allows for the deferral of the fiscal cost of the land purchase over time. To reduce the perceived risk of the pensions, a portion could be guaranteed by the South African state, while another portion of the pensions could be guaranteed by an international donor consortium against political risk. A time limit on the pension offers would encourage additional land supply for the critical first few years in which much land needs to change hands to satisfy the land hunger.

- d. Another option for increasing the supply of land would be to encourage the Credit Board and other financial intermediaries to accelerate the foreclosure on farms with non-performing loans. For a certain number of years the banks would be recapitalized for a certain percentage of their loan losses, say 30%, on farms which change hands from current owners to any of the beneficiary groups, either in a direct sale, or as a consequence of foreclosure. Finally the state could pay brokers a fee for bringing additional land on the market.
- e. On the demand side, the credit system is likely to place limits on the mortgage loans that beneficiaries could apply to their land purchase. Even today, for example, the Land Bank's mortgage finance is capped with an upper limit defined by the productive value of the land. Thus, by limiting the price which beneficiaries are able to bid, such a lending policy will help to avoid price wars between competing beneficiary groups.
- 99. If all the above measures fail to stimulate an adequate supply of land in a given district, an institution such as a district land committee could be empowered to recommend expropriation of specific farms to a national land committee under the constitutional provision for expropriation in the public interest. In order for the benefits of a market-assisted system to be realized this option needs to be used only rarely, if at all. Such action should, therefore, be triggered by a clearly specified set of indicators, such as an excessive rise in the real land price or an excessively low level of transactions relative to beneficiary demand. A recommendation to activate this option would have to be reviewed by the national or regional land committee to ensure that common policies with respect to the trigger indicators are satisfied before the district land committee could expropriate with compensation. If an expropriation order is issued, the land committee would then be able to distribute the land via the normal market-assisted mechanisms to program participants.

Summary

100. The operation of the land reform (or land restitution) program is summarized by the flow diagram in Figure 4. Beginning at the top of the diagram, individuals (or groups) that wish to gain access to land have three choices: (i) seek land through the restoration process; (ii) acquire land through the redistribution channel; or (iii) purchase land without assistance from the program. The criteria for participation in the restoration process will be well-known, and any individuals (or groups) that qualify would submit an application to the appropriate institution (e.g., a land claims court, a land commission, or a land committee). Having entered the claims process, there are four possible outcomes: (i) a land award; (ii) a cash award; (iii) the denial of the claim; or (iv) conversion of the claim to the redistribution process. The latter outcome would be an option for a claimant who felt that the claims process would be too time consuming and was willing to accept compensation through automatic participation in the redistribution process. In designing the program it may be decided that special consideration should be given to such individuals (or groups) in the redistribution process. Hence, claimants who relinquish their claim to restoration could be put in the front of the queue or awarded additional points if that is the relevant model.

Figure 4: Land Reform or Restitution Process



101. The individuals or groups wishing to participate in the redistribution process (or channel) would apply to the relevant institution. If the applicants meet the criteria (which would need to be set at the national level after consultation with regions) they would be responsible for identifying and assessing land. The beneficiaries would be responsible for identifying a piece of land, but would be eligible for assistance in this activity. This assistance could be used to find and assess land, as well as provide advice on various land use options. Once a suitable piece of land is identified, financing could be arranged from three possible sources: (i) the grant component available from the program; (ii) the beneficiaries own resources; and (iii) a bank loan. Once the sale (or lease) is completed, the beneficiaries would then be eligible for support services.

LAND REFORM: OUTSTANDING ISSUES

102. The various options described above leave unanswered several questions about redistribution and how it will operate. The present section attempts to address two of these questions: (i) is it appropriate to compensate current landowners for assets acquired under the apartheid model; and (ii) recognizing that land redistribution will not provide agricultural land for the entire rural population, what safeguards and/or alternative programs are necessary?

Should Current Landowners be Compensated?

- 103. Whether or not current landowners will be compensated is of concern because these landowners have acquired land with the assistance of racially motivated apartheid policies. If they are compensated at the prevailing market price, some would argue that they have benefited from apartheid. Ultimately, a new government will take the decision on this issue, but there are several points that might inform the decision.
- 104. First, the current owner is likely to have acquired the land in a bona fide transaction, typically as a purchase in the market. In such cases, the previous owners were the primary beneficiaries of apartheid, since many of the privileges associated with apartheid policies would have been capitalised into the prevailing land prices.
- 105. Second, in addition to the former landowners, apartheid policies benefitted much of the White population that had no direct interest in agricultural land. This includes not only the providers of agricultural input, marketing and financial services, many of whom captured rents from anti-competitive restrictions at the expense of farmers and consumers, but also the mining, manufacturing and service sectors, which benefitted from the cheap labor and restrictions on entry of Black entrepreneurs and competitors. Therefore, failure to compensate current owners of farmland for the price of land would impose the cost of a land redistribution program on only one group of those who have benefitted from apartheid, namely the current owners.
- 106. Third, many of the current landowners are heavily indebted, with the most severely indebted ones being most likely to leave the farm sector. Confiscation would mean that the capital loss would be shared between the net worth of the current landowner and the debt claim of the concerned lender. Consequently, a large scale program of land redistribution without compensation would not only eliminate the net worth of the current owners, but also could bankrupt many of the agricultural lending institutions.

- If, as is likely, these institutions are needed to finance the new owners in the future, the new government will find it necessary to refinance the losses of the lending institutions associated with the confiscation of the land. Thus, even if compensation is not paid, the state will probably need to pay at least for the unrecoverable farm debts of the farms it takes over.
- 107. Fourth, failure to pay compensation will be viewed as politically unacceptable, not only by the current owners and their lending institutions, but also by nonagricultural interests, which will see this as a first step towards nationalization without compensation. These interests would likely oppose the entire land reform program. Finally, external investors and South Africans with capital invested abroad are likely to react by reducing their investment in or repatriation of capital to South Africa.
- 108. Even though there are many reasons to regard the past acquisition of farm land as being of doubtful legitimacy, it is the inequities and the lack of practicality associated with any confiscation or compensation at less than market prices that makes such an action ill-advised.
- 109. There remains the question whether the compensation to be paid should be at or close to a market price. While there are legitimate reasons to tax the current landowners for their share in the gains form apartheid, taxation in the form of a reduction in the compensation paid to them may not be advisable. Such efforts will be viewed as expropriation without full compensation and will be resisted and contested, possibly with lengthy delays. Such delays will inevitably be at the expense of the potential beneficiaries. An alternate approach would be to tax the capital gains of the current owner associated with the compensation at market prices, or to include the payment of the current owners in a broader restitution levy on all wealth.

Land Markets: What About Land Prices?

In the 28 years between 1964 and 1991, more than 300,000 percels of land changed hands within the commercial agricultural sector. The area transferred averaged 3.7 million bectares per year, and the average parcel transferred was about 270 bectares in size. The smallest amount transferred was 2.9 million ha in 1972, and the largest 5.5 million ha in 1980. Thus there has been, over a long period, an annual transfer of about 4% of the commercial agricultural land, and the transfer rate has been reasonably steady, varying from a low of 3.3% to a high of 6.4% of the agricultural land.

Since the average commercial farm is about 1,335 hectares in size, the land market has been concentrated in purcels below the average. In 1991, for example, almost 55% of the purcels transferred were below 100 ha. The averages have also varied among the four main regions. In the Cape, the average purcel transferred over the whole period was about 685 ha, while in Transvaal a was only 204 ha. Half of the transferre were in Transvaal, accounting for 30% of the land transferred.

Approximately 62,000 commercial farms occupy an area of around 63 million ha, with an average farm size of 1,335 ha. Among the four main regions, the distribution is as follows: Cape 24,000 farms (average size 2,190 ha), Natal 6,200 farms (average size 636 ha), Transvari 20,000 farms (average size 690 ha), and Orange Free State 11,000 farms (average 1,040 hs). In 1988, almost 20% of the total area was rented, leased, or share-cropped, but most of the rentals were within families, and only a small proportion were genuine rentals:

The prices at which transfers took place in the market rose steadily from R39/ha in 1964 to R768/ha in 1991. Up until 1977, the transfer price also increased in real terms, from about R355/ha in 1964 (in terms of Rand of 1985) to R550 (in 1985 Rand). Thereafter, although average land prices rose in nominal terms, they fell continuously in real terms, to reach about R280 in 1990 (in 1985 Rand).

A recent analysis of the land market described above has been carried out, using data by agro-economic region and for RSA as a whole, from 1955 to 1990. The analysis employed a model based on the expectations of land purchasers which underly their decisions about how much to pay for land. Predicted prices based on the model give a good fit to the observed prices actually paid, so the model is regarded as having good explanatory value. The results show that land price expectations (what purchasers expect to happen to land value in the future) are the most important explanatory force in land price swings. These expectations, in turn, are based on past patterns of prices, and several other variables. The other variables which show up as most important are inflation rates, changes in the opportunity cost of capital, and returns from farming. These factors, acting together to form purchasers' expectations, resulted in substantial land price increases in 1971, and substantial decreases in 1978. The large shock of 1970/71 continued for several years as indirect effects worked their way through land price expectations.

The model is capable of analyzing the impact of other variables which have not yet been observed in the land market, such as a land tax. It can also assess the impact on land prices of a significant increase in the volume of transfers, which might occur in a market-assisted redistribution of land such as that envisaged under the Rural Restructuring Program. It would be important to know whether such a program would be likely to raise land prices, and if so by how much. Note that the likely increase in land prices will depend on whether the current owners will want to invest their receipts from the sale of land again in agricultural land, or whether they will prefer investment in financial or other nonagricultural assets. It would also be important to decide, in advance, what policies could be adopted to ensure that no untoward price swings took place. The analytical work has yet to be completed to answer these questions.

Rural Poverty

Scope of Rural Poverty

110. The most important ways of dealing with the widespread poverty in South Africa's rural areas will be increasing the incomes of poorer people through distribution of productive assets and accelerated, labor-intensive growth of the economy. The first of these includes the land redistribution, and

supplementary rural sector initiatives, described earlier in this report. The welfare of the poor will also be enhanced if agricultural policies help to lower food prices in real terms, as described earlier. While these various initiatives will help to address rural poverty, there will continue to be people who need additional assistance. This section examines options for addressing the needs of these people.

- An Urban Foundation study measured the proportion of households whose incomes fell below a minimum living level and showed that about 42% of households in the country were in poverty in 1990, the majority in rural areas. The study estimated that in rural areas 5% of White households, 8% of Asian households, 40% of colored households, and 68% of Black households had living levels below the poverty line. In rural areas of the bantustans, as many as 83% of Black households fell below the poverty line. Studies carried out between 1990 and 1992 in KwaZulu, Transkei and Bophuthatswana, showed that the poorest groups lacked access to wages, remittances, or social transfers. They accounted for about 4% of the population, and had monthly per capita incomes of R32 (male headed households) and R23 (female headed households). For this poorest group, more than half of income came from agriculture; in no other group did more than 10% of income arise from agriculture.
- The poorest groups described above lack the wherewithal to benefit from greater access to land. The proportion of female headed households is higher for these groups than for others. It is likely that better access to employment, to activities of the informal sector, and to welfare payments will be more important for raising incomes of these groups than access to land alone.

Welfare Programs Which Address Poverty

The main programs funded by the present South African government that seek to address poverty alleviation have an annual budget of around R8.14 billion (Figure 5).

Figure 5: Government-Funded Poverty Alleviation Programs

	Annual Budget (Rand billion)
Welfare	4.40
Whites (R200/capita)	1.00
Colored (R250/capita)	0.80
Indian (R204/capita)	0.20
Black (R85/capita)	2.40
VAT Relief on basic foods	3.00
National Nutrition & Social Development Program	0.40
Public Works Program	0.30
Protein Energy Malnutrition Scheme	0.04
TOTAL	8.14

Welfare. The welfare system, with a total budget of R4.4 billion, is administered by 17 services which are fragmented, inconsistent and allot inappropriate roles to social workers. The poorer groups

: :

receive substantially less expenditure per capita than others. Expenditures for Black welfare (R2.4 billion) are divided among the provinces (R1 billion), bantustans (R0.8 billion) and TBVC states (R0.6 billion). The majority of the budgets are allocated to old age pensions (68% for Whites, 40% for Coloreds, 39% for Indians, and 77% for Blacks). The next largest category is Disability payments, followed by Family and Child Care, and finally very small amounts spent on Poor Relief. The Family and Child Care category may become very significant for Blacks in the future, since such provisions (especially for children's health) are increasingly regarded by UNICEF as vital for the welfare of children, and on the demand side, the large number of single parent households among the Black population, to whom such welfare would apply most particularly, are only beginning to become aware of the service and apply for it.

- 115. The old age pension is an especially important source of income for Blacks in rural areas. It provides regular payments, probably going disproportionately to women (who most need it), and the administrative structures for delivery are already in place. Serious efforts have been made by NGOs to increase the proportion of eligible persons who are actually enrolled. In 1991, it is estimated that around 71% of eligible rural Black families were receiving pensions. There remain 29% who are not, none of whom receive pensions from private funds. At the same time as more full coverage is being sought, however, there may be a need to decrease the level of the old age pension, in order to provide funds for other programs which target poverty more directly in families which do not have family members old enough to be eligible for the pension.
- 116. National Nutrition and Social Development Program. The NNSDP, which began in 1990, is funded by government, administered by the Department of National Health and Population Development, and implemented by NGOs. The program had difficulty developing appropriate working relationships between government and the NGOs, and the arrangements for this vary greatly among the regions. The program relied initially on food parcels, whose contents were inappropriately formulated to address undernutrition. There have been concerns about corruption in the commercial arrangements for assembling the parcels, as well as with the competition the parcel system provides for trading stores, especially in remote areas.
- 117. In the absence of an effective nutrition surveillance system, allocation of food parcels has not been effective, and the program has developed a marked urban bias. There have also been problems of coordination between the NNSDP, run by the Department's Welfare Division with a poverty focus, and the Protein Energy Malnutrition scheme, run by the Department's Nutrition Division with a focus on malnourishment. Ideally, there should be close collaboration between such schemes, in order that when a child receives treatment for malnourishment, the family can also receive assistance on grounds of poverty. While a start has been made during 1993 on addressing the various problems of these food programs, much more work needs to be done to increase their effectiveness. The establishment of a nutrition surveillance system, in particular, has yet to be started.
- 118. The country's welfare system will need to be widened over the next few years, to increase access by households without employable adults, where adults cannot work away from the home without reducing necessary care to others, and for households in temporary distress. This may need some reduction in levels of old age benefits as their reach is extended towards universal coverage. No reduction in levels should be countenanced, however, until other programs are in place. Such other programs would include

more direct efforts to provide employment, for example through public works programs. When the latter have been established, it may be possible to phase out the NNSDP. There is a need, however, for regional experimentation over the next few years, including food vouchers and other feeding schemes, to develop a mix of initiatives to address rural poverty and food security problems more effectively.

Employment Programs

- 119. The main way of dealing with the country's massive unemployment will be economic growth which is employment-intensive (in contrast to that of the past decade, which has generated, in the formal sector, additional jobs for as few as 6% of additions to the economically active population). In support of such an employment-intensive growth path, maintaining low food prices in real terms will be crucial. The key factors for that are continuing improvements in agricultural technology, and increasing substantially the efficiency of food processing and marketing. But food security in rural areas will also need to be assisted by income generating programs outside agriculture, and special employment creation schemes will be an important part of this. The enormous disparities in regional economic activity, welfare, and infrastructure provide the setting for such special employment schemes to have a valuable impact on economic growth while creating jobs.
- 120. A rural <u>Public Works Program</u> (PWP) is proposed, which would create productive economic infrastructure and build human capacity, thus addressing simultaneously two central needs of the rural areas. The proposed PWP would be developed around the following principles:
 - a. the program would be national in scope, and would require a consensus among government, trade unions and local communities about employment conditions, political and financial commitment;
 - b. while careful engineering design would be needed, local communities would be closely involved in project identification and planning, in order to ensure that they would "own", manage, and maintain the assets constructed under the program; local management and maintenance would be critical to success:
 - c. pilot projects would help accelerate decisions about the nature and design of infrastructure;
 - d. among others, projects undertaken would include roads and tracks, water supply, rural electrification, sanitation, schools, clinics, training facilities, housing, irrigation, and tree planting;
 - e. labor-based construction methods would be employed, which have been found to be compatible with acceptable engineering quality of assets in most cases;
 - f. specific training to increase the skills of participants would be undertaken;
 - g. a national fund is proposed, underpinned by a long term (at least ten years) commitment by government, with clear, efficient guidelines for access, and mechanisms to ensure that

benefits would not be captured only by the better organized and informed;

- h. the proposed national fund would be formed by consolidating in one place many of the budget allocations for "employment creation", "emergency relief", "training" and so on, which are scattered throughout the government; the total of such programs in the 1992/93 budget is estimated to be around R6.2 billion, or 5% of the total budget; such a consolidated fund, it is argued, would be likely to have more impact than the many individual fragmented programs;
- i. financing would be from the national budget initially, with the consolidation proposed above, but a variety of other funding mechanisms would be explored, including from the private sector, international aid, and contributions from the beneficiary communities, possibly in kind in some instances (although the emphasis would be on remunerative employment for poorer persons); some models for joint private and public sector initiatives are already available in the National Housing Forum and the Independent Development Trust (the latter's Relief Development Program in 1992/93 expended about R49 million to generate 4.7 million days of work, a cost per equivalent full-time job of about R2,600), to construct roads, dams, water supply systems, clinics, classrooms and creches).

PART III: OPTIONS FOR ADMINISTERING A RURAL RESTRUCTURING PROGRAM

- 121. Successful rural restructuring needs efficient administration, good governance, development of infrastructure, delivery of goods and services (both agricultural and nonagricultural), the redistribution of land, and the general development of community life in rural areas.
- The systems which administered apartheid have been complex and wasteful. A highly centralized white bureaucracy is parallelled by a series of highly centralized black bantustan bureaucracies. Within the bantustans, tribal and regional authorities claim to represent traditional social groupings. In reality, services are focussed on urban and peri-urban areas with limited outreach to rural areas. Other bureaucratic complexities and duplication exists in the Regional Services Councils, Joint Services Boards and numerous parastatals. Rural restructuring will need to develop new methods of administering and delivering services to rural areas. methods need to be developed from a thorough understanding of the low education levels, scattered families, and severe poverty which are characteristic of rural areas at present.
- 123. Recently in South Africa, a great deal of attention has been given to national and regional levels of administration. Only now, however, are issues relating to lower levels of government starting to be addressed. International and South African experience provide clear lessons, one of which is that highly centralized approaches—whether at the national or regional level—are not effective in promoting effective rural development. It is also clear that directly elected and responsible local governments are critical for rural development to have any chance of success.

Rural Development Administration in India

The constitution developed after independence (1947) gave the states strong powers to administer their own development. Agriculture and irrigation, for example, are state matters. While it mandated elected local governments at village and district levels—the Panchayati Raj—it left the assignment of functions and resources to local government to be decided by each state. Most states starved these local governments of resources and let the electoral process at the village and district level decay.

A revival of the Panchayari Raj system began in the 1980s in the states of West Bengal and Karnataka, where district elections to the councils at village, block and district level became mandatory. The state's own centralized development agencies were subordinated to the elected council, which received substantial authority to decide development spending. These measures were opposed by the state level bureaucracies and specialized development agencies; however, the result has been accelerated rural development, much more closely matched to the desires and needs of local populations, and a reduction in misappropriation of funds and corruption. In Karnataka the local bodies still do not fully take the interests of the poor into account, but service delivery has improved.

After 45 years of independence, India recently approved a constitutional amendment that makes similar changes mandatory for all the states that have ratified the constitutional amendments. Apart from the mandate of direct elections to the village, block and district councils, the amendment mandates an independent electoral commission at the state level to supervise the elections, and a finance commission with statutory representation of both the state and the districts. The commission assigns responsibilities to the different levels of government and redistributes the fiscal resources of the state among the state, the districts and the villages.

The Policy Framework

124. There is an urgent need to give rural issues a central place on the national agenda. This requires clearly articulating a national rural development policy. Such a policy needs to provide for: (i) clear administrative boundaries; (ii) accountable local government with a secure financial base, and powers to

take action in response to both national policy and local need; (iii) investments in infrastructure and services; (iv) access to land, and tenure security; and (v) measures to build the political and social capacity of economically weaker rural groups, so they can speak and act concerning their needs.

125. While a clear statement of national rural development policy is crucial, it is not sufficient. The policy framework established at the national level needs to be adapted and reformulated, at every level, by the affected people as well as those involved in the process of implementation. Because unresponsive or uncooperative public institutions can paralyze the best designed reforms, this reformulation needs to take place within communities and the institutions created to serve them.

Administrative Boundaries and Responsibilities

126. The current political negotiations envisage four tiers of government: central, regional, district, and locality. For successful rural restructuring, a public administration at district level, such as a District Council, is necessary. Such a District Council should be elected by district residents and be represented at the regional level. The boundaries for districts need to be set with regard to integration of existing racial administrations, integration of urban and rural areas, social cohesion, the potential economic base, and natural resource endowments and limitations. In order to facilitate this process, one option is to appoint a Boundaries Commission to investigate and recommend district boundaries.

127. The following allocation of responsibilities can be considered:

- a. District Councils could be responsible for primary health care, primary and secondary education, water supply, district roads, land allocation, land use planning and zoning, economic development promotion, welfare, waste and pollution management, recreation, tax collection, and capacity-building for economically weaker groups.
- b. Regions could be responsible for functions and services at the regional level, including transport networks, health care, tertiary education, economic planning, land use planning and zoning, and natural resource management.
- c. the Central state would then be responsible for policies on health, education, agriculture, defense, law and order, foreign affairs, internal affairs, fiscal and monetary matters, justice, land, rural development, regional and local government, devolution of appropriate line functions to regions and districts as suggested above, fiscal allocations to regions and districts in line with policy, and promotion of democratic and sound workings of regions and districts.
- d. Localities would take various administrative forms (for example, municipalities, tribal authorities, returnee groups) all of which would be represented at district level; such arrangements would need to be negotiated within districts, and be flexible enough to be changed over time.

Institutional Restructuring

- 128. There are two options for creating an institutional structure to implement rural restructuring. The first would be to disband all the institutions which have hitherto been ineffective and to begin with a clean slate. The alternative is to reform existing institutions on the assumption that they would either reform from within or would willingly allow themselves to be reformed from the outside.
- 129. The clean slate approach is unlikely to work as a general method because administrative upheaval on such a scale would leave a vacuum in important development arenas for too long. It is best used only in essential areas and on a limited basis. The problem with the reformist alternative is that the decision to reform does not automatically endow institutions with: a collective will to operate in a different manner, the technical abilities to grapple with issues they have never addressed before, or the financial resources to follow through on the decision.
- 130. Creating an institutional environment to support rural restructuring will therefore involve some elements of both radical reconstruction (in which institutional structures are simplified and technical expertise strengthened) and of reform (through which institutional goals are transformed and development cultures created). Reform is a far more demanding matter and involves difficult judgments about institutional politics as well as capacity. It is important to recognize that many of the existing structures are unsuited for anything but a continuation of the discredited top-down approach, even if current negotiations mean that the "top" will soon be at the regional rather than the national level.
- 131. While South Africa must devise its own specific solutions to its problems, international experience suggests four key objectives: (i) autonomy and accountability; (ii) flexibility and responsiveness; (iii) access to and control of resources; and (iv) simplification.

Autonomy and Accountability

- 132. Empowering the communities directly affected by rural restructuring to negotiate their own development can happen only through direct election of local bodies with the authority to guide development activities in their areas and with assigned resources and fiscal measures to match their responsibilities. Clarity in assignment of responsibilities across different administrative levels is essential. No state agency would be able to undertake development projects or programs in a specific area without the concurrence of the elected local district council.
- 133. Weaker constituent groups within districts, particularly women and the very poor, will require special attention—such as affirmative action programs—to ensure participation in and appropriate benefits from district-level decisions. Ensuring an adequate response on the part of local institutions to these special needs may be where special forms of community based organizations (CBOs) could play a pivotal role.

Flexibility and Responsiveness

134. Local public bodies at the level of the district councils and below would have the powers to adapt and apply the objectives set out in the national and regional rural development policies. They would also hold the authority and command the resources to carry out development functions.

- 135. There is much that is currently dynamic in South Africa's rural areas. In particular, certain CBOs and NGOs have displayed their ability to identify gaps where needs are not being met and/or services not provided. The typically small scale operation of these organizations, coupled with a high degree of flexibility, has enabled some of them to address and remedy local failures in service delivery very well.
- 136. Much can be learned from the operations of these organizations. The issue is the appropriate role for each. CBOs range across a wide spectrum including agriculture, church groups and neighborhood associations, and there is great potential for them to function in very positive ways. Well-organized CBOs, such as the Farmers' Cooperative, can play an important national role as well as enhancing purely local capacities and undertaking other development functions for their constituencies. NGOs, on the other hand, appear to be especially effective in mobilizing analytical, legal, organizational and managerial resources. By concentrating such resources on the problems of deprived and victimized groups, they have been particularly good at influencing policy and government actions. In some cases, NGOs have also been instrumental in providing assistance to emerging CBOs.
- 137. Because both CBOs and NGOs will in the future be claimants for public sector and donor resources to operate in rural areas, a systematic assessment of national CBO/NGO experience in order to identify precisely the comparative advantage of each type of organization in supporting rural development initiatives may be in order. Such an assessment could also identify those areas where public systems have chronically failed in the past and where CBOs/NGOs have filled administrative vacuums, as well as where interim operations of these CBOs/NGOs is essential to achieve a smooth transition.

Access to and Control of Resources

- 138. Fiscal decentralization is needed if the scale, scope and timing of rural restructuring and development activities is to match local needs. The community development councils should thus participate in the budgetary processes.
- 139. Local and district councils need to have the power to generate revenues and to control the expenditure of funds collected. It is envisaged that the new councils would have the power to set rates and collect levies, fees and license charges, and possibly real estate taxes, from their constituents. Only by having such access to local resources would the councils have the ability to coordinate development activities and to request additional external resources without losing their autonomy.
- 140. In parallel with the redistribution of land, a low, flat-rate land tax might be introduced for all agricultural land with rates set locally. The local development council would retain a large share of the revenues collected under the tax and would pass on a small proportion of the revenues to the regional level. In addition, improvement levies could be charged on nonagricultural land.
- 141. The ability of councils to generate revenues will depend on their local tax base. There will thus be a need for a flow of resources from national and/or regional programs to the local level in the form of revenue sharing and unrestricted grants. Typically such grants would be negotiated between regional and local or district administrations. They may also be structured so as to reward administrations where notable efforts have been made to generate revenue from own resources. These grants should include provision for an equalization element, which would take account of the needs of the community and spatial inequalities in access to services. The needs of the community would be calculated by reference to the

population base and the economic base, as well as the ability of the council to generate its own tax revenues.

- 142. Even with revenues from local resources and unrestricted transfers from higher levels, local administrations are likely to spend insufficient amounts on such things as agricultural extension, nutrition programs, pollution control, clean water and sanitation, and resources to prepare projects to assist poor communities.
- 143. In these circumstances, the regional and/or national governments will find it necessary to encourage localities to invest in these areas, which are of obvious importance in a restructuring program. A system of conditional matching grants would need to be devised to encourage local governments to follow guidelines set at regional and national levels if they wished to participate in the programs. In this way, the efforts of communities in mobilizing resources could be used to attract additional resources into local areas for activities with positive spillover effects for the community at large or for identified segments of the community.
- 144. Regional services levies, such as those administered by the present Regional Service Councils (RSCs) and Joint Services Boards (JSBs) should be suspended. These levies are a specific tax on the employment of labor and are charged to employers. Although the revenues collected are small, their application is ad hoc and any disincentive to employment in rural areas needs to be eliminated.
- 145. With the decentralization of controls over revenue generation and expenditure, there will be understandable concern over accountability. Normal accounting and audit procedures would be strengthened at all levels. International experience shows that decentralization, coupled with electoral responsibility, greatly expands the opportunities for transparency of administration. This in turn leads to possibilities for more frequent and timely audits, in which the scrutiny of the community plays an important role in corroborating reported revenue and expenditure. Such accountability at the local level has been shown by experience to be a more powerful way of reducing leakages and corruption than centrally administered audits of resource flows. It should be noted however that a considerable amount of capacity building may be required to enable communities to assume these kinds of roles.

Land Redistribution

- 146. The emphasis of land redistribution must be on providing access to land, under various forms of tenure and for various purposes. There is need for new administrative arrangements to deal with land transfers, even though some land redistribution will operate through judicial land claims procedures.
- 147. The establishment of a new institution—the District Land Committee—is an option for specifically dealing with land issues. The land committee would be fundamentally a fact-finding body, representing specified interest groups in the community. These groups would include, but not be limited to, the commercial farmers, representatives of beneficiaries, traditional authorities, labor unions, church and civic groups, and women. Membership would have to be carefully balanced after an appropriate consultative process at national and regional levels.
- 148. A District Land Committee would serve three main functions. First, through a process of fact finding, it would document land claims and compile details on land records. It is envisaged that on the

basis of its investigations focusing on issues of restitution, the Land Committee would make the initial recommendations to the Land Court, which would in turn convert these recommendations into judicial findings. These judicial findings would then be open to appeal.

- 149. Second, the Land Committee would administer the application procedures for land redistribution unrelated to prior land claims. In doing so, it would receive applications and process them in accordance with the criteria established at the national level. It would then allocate land and grant resources at the local level. It would also maintain local records of the land transactions which it administered and transmit records of transactions to national level.
- 150. Finally, an adequately representative Land Committee would be well positioned to provide an arbitration function. Even the best land redistribution programs need mechanisms for informally resolving disputes. Experience elsewhere shows that a large proportion of such disputes can be resolved locally without recourse to external political or judicial systems.
- 151. It is important that the role of the District Land Committee be confined to land administration and that it have no development functions. To establish the committees with development functions would undermine the capacity to deal with land.
- 152. It should be recognized that the committees would be long-standing bodies and would require permanent capacities in the form of a secretariat and office facilities. Even though it is envisaged that the members of the committee would serve on a part-time basis, some minimum cadre would be needed to provide support and to service the committee. Resources would need to be made available for these purposes, perhaps from the suggested land tax.

SUPPORT SERVICES

Overview and Background

- 153. With the exception of the bantustans, most state-funded agricultural support services in South Africa have focussed on the needs of the large-scale commercial farming sector. Even in the bantustans, where extension services lack credibility, agricultural services have, until recently, been primarily directed towards the commercially oriented farmers who comprise about 13% of homeland rural families and generally have larger land and livestock holdings. The small part-time farmers and resource poor non-land holders, who together comprise nearly 90% of rural families and the overwhelming majority of the rural poor, have been virtually ignored.
- 154. The exceptions are a number of rural based NGOs (including Community Based Organizations) and commodity organizations (sugar for example), which have promoted development among the neglected majority. The DBSA Farmer Support Program is also focussing on smallholders. Due, in part, to limited resources and to a lack of coordination with both the state and other NGOs, their impact has been small. In those few cases where support services have been extended to small scale farmers, the service paradigm has been mainly a top-down, paternalistic one with little attempt being made to seek the views and

participation of the recipient communities² and individuals. Moreover, in agriculture, the emphasis has been on target income levels for white farmers, and the promotion of comparatively high cost, high input, capital intensive, modern technology.

- 155. A large proportion of the disadvantaged population do not rely on agriculture as a primary source of income, notwithstanding that subsistence production is a critical part of many household economies. In comparison with off-farm employment incomes, the low return to labor from farming serves to make it an unattractive occupation. The erratic rainfall patterns of many agro-ecological zones combined with comparatively poor financial resources, have exacerbated the risky, low-income status of farming. The consequence is that many communities have a very low level of agricultural skills.
- 156. The low returns to farming are due primarily to the barriers and distortions designed to favor the large-scale sector at the expense of small farmers. This has been exacerbated by inequities in the provision of and access to services. In general, a lack of skills, a lack of appropriate support services, a lack of appropriate technology, and a lack of financial and land resources have exacerbated these distortions and barriers. Despite this situation, however, deprived rural families have frequently shown considerable farming skills and entrepreneurship in circumventing the system.
- 157. The challenge for rural support services in a new South Africa is unprecedented in its complexity and magnitude. This situation calls for a serious re-examination of the types of support services needed and the methods of delivering them. There is no prescription or system for promoting and supporting change and development. No one system will suit all of South Africa with its diverse agro-ecological zones and farming systems. Moreover, the need is so great that the public sector (which is itself facing major changes) cannot possibly deliver all of the support services.
- 158. The support needed to successfully implement rural restructuring will differ according to the needs of local communities. These will vary according to agro-ecological zone, the existing and potential landuse patterns, the available infrastructure and services, the type of community (and its individuals) and its resources, history, culture and social organization. Moreover, the type and degree of support needed will vary over time as priorities change. Furthermore, wide international experience has demonstrated that in any program of land re-distribution and rural restructuring, the degree and pace of success is largely dependent on the early provision of a range of appropriate supporting services.
- 159. This section discusses a number of main themes and principles that need to be considered in meeting the challenge of establishing the effective support services for promoting the realization of these opportunities. The main themes include:
 - a. promoting community-led development through empowering local communities to define the priorities and to make choices as to the types of services they require and who should provide them;

² For the purposes of this report, a community is defined as a group below the District local government. Communities will vary in size from perhaps 50-100 families to over 1000 or more. The term community does not imply some type of collective approach. Support services would be primarily aimed at individuals within these communities. Moreover, it is acknowledged that a range of farm sizes, systems and producer orientation — household plots, household production only, commercial orientation with some sales, fully commercial — would comprise the smallholder sector.

- b. redirecting existing research, extension and education and training services towards serving the needs of small farmers;
- c. re-orienting and re-training of existing services and staff to more adequately equip them to address the needs of an entirely new group of beneficiaries and socio-economic environment:

Community Led Agricultural and Rural Development

- 160. A vital part of the development process is empowering local people (individuals and communities) to take charge of their own affairs, to establish their own priorities, to make choices, and deal effectively with outsiders. Few governments display a real willingness to trust the people to decide for themselves. But where public funds have been transferred directly to local communities and used by them according to their priorities, as in parts of India and in Mexico, the result has been a remarkable acceleration of rural development. Sustainable rural development is about giving people the power to make choices, to take responsibility, and to make those who provide services and inputs accountable to the recipients.
- 161. The process calls for placing financial and other resources (information, human, natural) at the disposal of local communities. This presents a challenge for public funds, since issues of recognizable and formalized organizations, financial accountability, management capacity and so on, are very real. A prerequisite for success is the establishment of democratically elected representation within a defined community. One option is the establishment of democratically elected Community Development Councils which become the recipients of government funds to be used for community agricultural and rural development in accordance with priorities defined by the community. These funds would come directly from the central or regional government to the community account on the basis of a contract. Continual monitoring and auditing of such programs is critical. The South African Independent Development Trust administered drought relief program—which transfers funds directly to communities for various types of projects and employs an independent agency to monitor and audit the program—is a case in point.
- 162. Hence one option that can be considered for delivering support services would operate like an entitlement scheme. Under this option a community would be entitled to a bundle of resources. The bundle would likely include guidelines on the use of the resources such as the share devoted to social and economic infrastructure services. A pre-requisite would be that a management and administration training program be available for the community development council. Special training is needed for some office bearers such as the secretary/book keeper. Such training might best be provided by specialized persons or agencies under contract to say the Department of Agriculture.
- 163. If the Community Development Council option is adopted, they would need assistance from trained and resident community development workers whose task would be to provide guidance on identifying suitable projects, facilitating access to the services and inputs needed for implementation, and sourcing information on the range of services and programs available. Such a person might also provide some assistance with management and accounting, credit applications and so on. Under the guidance of professional extension workers and subject matter specialists, they might also be able to provide a certain amount of extension.
- 164. Since a fundamental objective is building self-reliance and local capacity, communities also need

to make commitments towards projects for which community development funds would be used. This could be either cash or in kind. The total cost of any project would include the cost of community-provided labor and materials. The value of these contributions would be assessed as the community share of the cost. Moreover, public funds need not be entirely on a grant basis.

- 165. Communities may also elect to use development funds to finance the cost of services, contracting with an NGO, CBO, or other agency (government or private) to provide a community development worker or some specialist technical advice such as irrigation development. A key requirement is that funds allocated to communities should be used at their discretion. Democratic legitimacy, improvement in management, and accounting skills are necessary pre-requisites.
- 166. The risk of such programs is that the funds could be mismanaged or used for the benefit of a powerful elite in the community. Losses will occur, but the potential benefits far outweigh the likely losses. Moreover, appropriate procedures and structures can be installed which safeguard the community at large and the government against such abuses.

Research, Extension, Education and Training

Agricultural Research

- 167. South Africa enjoys a world class agricultural research service equipped with first-class infrastructure and staffed by highly trained and competent professionals. Most research is conducted within the state service, but the private sector also includes some well-equipped research capacity. The research service is supported by an equally well-equipped education complex. The challenge is to reorient this resource towards serving producers who are, in almost every respect, the opposite of the existing clientele.
- 168. The almost exclusive focus of past research has been on generating technology for the largely white, large-scale commercial sector. This sector is highly literate, well organized, and benefits from good infrastructure and a wide range of supporting services. It has also been the recipient of large and wide ranging direct and indirect state financial transfers.
- 169. In contrast, the environment under which almost all research is currently conducted bears no resemblance to the reality of the smallholder sector which is characterized by a high level of illiteracy, a lack of supporting services such as marketing, input supply, and transport, poor or non-existent infrastructure, the virtual absence of organized agricultural institutions, and a low level of resources land (quality and quantity), capital, equipment, skills, and very often, labor. The risk factor, moreover, is of much greater significance in smallholder agricultural systems. The huge majority are primarily concerned with daily survival and the provision of basic needs. For example, many households are largely headed by women for whom agriculture is only one part of a complex system. An additional complication is the social structure and organization of rural communities. A major task confronting the existing research service, therefore, is, among other things, understanding the complexity of the socio-economic systems in the smallholder sector.
- 170. The re-orientation of research might be achieved through a number of mechanisms some of which are complementary. First, those parts of the research system that are likely to continue to serve interests

outside of the smallholder sector might be privatized completely or placed on a full cost recovery basis. The forestry sector might be a useful starting point. Research facilities and skills do not need to be state owned. What is important is for the state to have access to the system for conducting special public good programs through contractual arrangements. Under arrangements, the program (but not the facility) would then be owned by the state. Second, the re-training and re-orientation process discussed below should be reinforced with a change in the personnel reward system to provide material incentives for smallholder relevant technology generation.

171. Third, for the state sector, government strategies are more likely to be implemented if financial resource allocation is tied to the implementation of relevant programs. Financial resources for research could be derived from a number of sources. including: government funding of core overhead and public good research; fees for specialist consulting services both within and outside of South Africa: research contracts with the private sector. other state organizations, and international clients; donor grants and loans for specific projects; royalties from the sale of new discoveries; and finally, government research and development

The Redirection of Research

Funne technology generation needs to consider the total socio-economic system in which technology is to be used. To be adopted, technology needs to be economically viable and risk acceptable to a resource poor, risk averse community. The future generation process requires greater involvement of the social science and economic disciplines. Moreover, researchers will need detailed knowledge of the socio-economic systems for which technology is to be generated. It is possible that system diagnoses when combined with a synthesis of past research results, could reveal at least some technology relevant to a number of small bolder farming systems.

In future, technology may be directed at family incomes, food security, employment creation, the optimal economic utilization of resources, examining management options, and the sustainability of natural resources. Examples include: low-cost technology, risk-reducing management systems, mitrient and water management, appropriate seed varieties, water harvesting and conservation techniques, the integration of crops and livestock in low input, small farm systems, gender issues relating to labor utilization and availability at critical times, agro-forestry systems, alternative draught power systems, the management of communal grazing lands, and improving output from traditional livestock systems.

An area which has been largely neglected throughout Africa is the integration of household management and agricultural systems. For example, most small farms are managed and worked by women and children, and yet little attention is given to how these constraints might be alleviated thereby increasing the time available for the farm. Alternative economic sources of domestic energy for cooking (solar power perhaps) and water harvesting for use in the household, could have strong effects on agricultural efficiency. Similarly, improving the health status of overburdened females and of young children needs to be seen as part of poverty alleviation, improving household food security, and improving agricultural output.

funds obtained through a competitive bidding process.

172. The latter would involve the establishment of a central Scientific Research and Development Fund, the transfers to which from central government (and donors and others) could be contested among all

research organizations, public, university, or otherwise. The Fund would allocate these resources in accordance with criteria developed from the direction given by the government policy and strategy framework. The process would act as an incentive for research to respond to the problems associated with small, low resource, risk aversive farming systems. In recent years the allocation of state funds for research through a competitive process has been successfully implemented in New Zealand where, as a consequence, research has become much more accountable for the utilization of its staff, infrastructure and financial resources.

173. Strong linkages between research and extension are essential if both are to be effective. The two services should also not be constrained by bureaucratic and institutional barriers, which might arise if the current structure of the Agricultural Research Council (ARC) and Department of Agriculture (DOA) is maintained. A strong case can be made for having both state research and extension organizations (ARC and DOA) within the same institution. It is not clear, however, that having both services within an independent parastatal will lead to a more efficient utilization of resources or more effective services.

Agricultural Extension - A New Extension Paradigm

- 174. Some options for the extension system and their delivery are discussed below. The underlying principle is to devolve responsibility for extension to the Districts and the recipients of the services who would be empowered to make choices as to who provides extension, and what type of services are delivered.
- 175. For the large-scale commercial sector, the services currently available from the private consultants, the cooperatives and the commodity sectors are highly skilled, appropriate and adequate to meet the needs of the future. Commercial farmers should have the option of using state funded services (central, region, district), but only on the basis of full cost recovery. The parallel in a developed agricultural economy is the full commercialization of all state funded extension (and research) in New Zealand. Furthermore, the commodity based research and extension services—sugar, coffee, tea—should be encouraged to expand their participation with the smallholders as is being successfully practiced in the sugar sector.
- 176. In Colombia, extension and applied research is the responsibility of the equivalent of a district government. In some cases the staff are employed directly by the district government. In others, where the district considers it does not have the capacity to manage the system, service delivery is contracted either to the private sector or to a consortium of districts. Funding is provided through earmarked grants from the central government, with matching funds from District resources. Both the extension and the subject matter specialists doing adaptive research and providing specialist backup to the village/community extension workers, are accountable to the district government. The advantage of the system is the devolution of management responsibility to the district government which is better equipped to ensure that the services are responsive to the needs of the local communities. In this model, the field extension workers are employed by the district government. Specific research identified by the subject matter specialists and extension workers, is done under contract to the state-funded research service.
- 177. In Mexico, many communities obtain grants from the agricultural refinance facility to finance part of the cost of resident extension workers who are employed by the community. The share provided by the community is supposed to increase progressively over time, but the central government always pays

some proportion. The government's contribution comes as a grant directly to the community which hires the extension agent and decides how he or she should work. Subject matter specialists are employed by the district or regional level and work with the community employed field level workers. Linkages with higher levels of research are informal, but additional research and technical training is conducted through contractual arrangements with the respective organizations. The system was developed in response to the inadequate extension provided by the government extension service. In contrast with the Colombian model, the Mexican communities are empowered financially to employ the extension agents according to established criteria.

- 178. In a number of developing countries (including several in Latin America and Africa), the local community is provided with a direct grant towards the cost of employing community extension workers. The community is required to provide an in-kind contribution to the extension service cost. This usually comprises a house, plot of land, perhaps an office and maybe a bicycle. The weakness of this system is the absence of formal linkages with state funded subject matter specialists and demonstration activities.
- 179. Another option is the Training and Visit (T&V) extension system which is widely practiced in many developing countries where smallholders predominate. The T&V system involves close linkages with research and extension and a two-way flow of information from research to farmer and vice versa. It relies on a strong management system from the top extension director to the field level workers. The operational program requires regular programmed visits by field workers to farmers (individuals or groups), regular supervision of field staff, regular training of both field staff and subject matter specialists. T&V is an intensive, programmed system which has succeeded in reforming and upgrading many poorly managed existing services. It effectively brings extension services to smallholders, improves the effectiveness of research, and gives beneficiaries the opportunity to bring local technical problems to the attention of high level managers and researchers. T&V is essentially a management philosophy which can be applied to all types of services. A considerable body of evidence attests to its effectiveness in raising output among smallholders in many countries.
- 180. T&V management and operational principles can be useful in making any extension model more effective. For example, in the Mexican and Colombian models cited above, programming of subject matter specialist field visits and the operations of the community employed extension workers along T&V management lines, would be a useful addition to these systems. In South Africa, decentralized system development through financially autonomous communities and district organizations is likely to be the fastest approach to meeting the urgent needs.
- 181. A farm system research/extension and participatory rural appraisal (PRA) process offers the best prospect for building credibility with communities and ensuring services are responsive to the community-defined priorities in a new South Africa. The PRA process involves frequent consultation with the community to first understand the systems with which extension must work; to diagnose the problems and bottlenecks; to examine the feasibility of possible solutions; and to design effective interventions. In many cases, the priorities are not technical or even directly agricultural. The provision of infrastructure and basic needs satisfaction may emerge as a higher priority. NGOs and CBOs have a role to play in expanding the participatory approach to extension and to community development. In South Africa, the Farmer Support Group program of the University of Natal is currently successfully practicing the PRA technique among smallholders in Natal.

182. The number of females employed in the official extension services is disproportionately low. Since the small-farm sector is largely in the hands of women, it follows that affirmative action is needed to greatly expand extension contact with women farmers. It is critical, for example, that multi-disciplinary teams conducting participatory rural appraisals and system diagnosis have female representation. Improving access to the training and education establishments is an integral part of any affirmative action program to increase the number of trained female professionals in agriculture. Some NGOs in South Africa report considerable success with female extension agents or community based facilitators. Comparatively slow progress has been made on this issue in most African countries, although the position has improved markedly in Zimbabwe, Tanzania and Ethiopia

Retraining and Reorientation of Existing Services

- 183. Political and social history, and the past almost exclusive orientation of education, training, research, extension and most other support services towards large-scale agriculture, calls for a radical reorientation and retraining program to more adequately equip individuals and institutions to face the challenge of the future. The needs of the new clientele, and the means of effectively servicing them, are different to those of the existing beneficiaries of state-funded services. Through a retraining and reorientation program, the past paradigm needs to become participatory and development oriented. Reorientation and retraining includes several dimensions. The first relates to attitude and all that implies in the South African context. The second dimension is the acceptance of the productive role of small, mostly part-time producers: that they can make a significant contribution to agricultural output; that redistributing land to small, part-time producers will not result in a massive reduction in food production; that the technology used in the large commercial sector has little relevance in the small farm sector; that low input, low-cost technology (ox plough, local varieties, hand cultivation, little or no fertilizer) is not a step backwards and can be economically efficient; that the first priority of smallholders is not necessarily agriculture.
- 184. The third is the potential of partnerships between the large-scale sector and the emerging smallholders. Much capital exists in the commercial sector human skills, infrastructure, services which can be utilized to the mutual benefit of all. Many individuals are ready and able to become part of cooperative partnerships to promote development among the rural poor. The synergy between the large-scale commercial sector and the smallholders in the sugar industry is an example of what can be achieved. Moreover, a resurgence of black smallholder agriculture will have effects on the entire rural economy and present opportunities for agri-business and service development for which the skills and capital exist in large-scale commercial areas.
- 185. The retraining program will need to continue for an extended period. Follow-up and evaluation will be needed. A new reward system should ensure recognition for successful re-orientation.
- 186. While no official reorientation program was involved, the comparatively rapid refocussing of the Zimbabwe research and extension services (and other state rural services including education) towards the smallholder sector was a consequence of strong political direction and a simultaneous reallocation of resources towards services and programs for the previously deprived smallholder sector. That this reorientation has not been as complete as it might be, has been due, to the questionable belief that core production of strategic crops can only be sustained through a strong large-scale sector where the benefits of scale economies can be captured. The remarkable increase in output from the Zimbabwe small farm sector attests to a successful redirection of rural support services.

Financial Support Services

187. The provision of formal financial support services to rural households in South Africa needs to be seen against the background of state intervention in the The result of this economy. intervention has been distorted financial policies and an extremely dualistic financial sector. On the one hand, there is a modern and sophisticated financial system which serves the needs of a small proportion of the rural population, and on the other, a micro-lending sector which attempts to service the majority of the population in both urban and rural areas.

188. The distorted policies, such as subsidized credit, are a major reason for the poor performance of the South African rural financial markets. have seriously distorted the way lenders allocate loans and borrowers use them. For example, low. negative real interest rate policies have induced the commercial farming community to misallocate financial resources to capital intensive agricultural production systems.

189. For the micro-lenders, the distorted policies have not created an enabling legal, financial and tax environment for sustainability. Legislation such as the Banking Act prohibits micro-lending institutions from mobilizing funding, while the Usury Act places a ceiling on the interest rates charged by a micro-lender

Growth and Small Farmers: Some international Experience

While the evidence documenting the achievements of small farms in expanding output is clear, this does not proclude the co-existence of large-scale farming operations which have continued to play an important role in both Kenya and Zimbabwe, for example. Since much of South Africa's agricultural land is not suited to small-scale farming this to still and climate constraints, large-scale farming will always have a sole to play.

The world-wide criticates, moreover, does not substantiate the fear of small producers and lower production in lead redistribution programs. In Kenya, for example, the significant increase in agricultural cusput which occurred following the subdivision of the large white-owned estates has been led by small producers, mostly an small units. This increase occurred with both food and cash crops. Simultaneously, however, large and small-scale farmers continue to coexist in a minually beneficial synergy. In Zimbabwe, the remarkable increase in cutton cusput sizes 1980 (almost unbled) is due almost entirely to an expansion of small farm cuspa. Similarly for smales, while national production has declined since independence, the proportion derived from the small producers has increased from less than 10% to nearly 60% in a normal year. A critical factor in both countries, was the provision of a package of support services (extension, marketing, infrastructure, social) to which small farmers had provisously been largely denied.

Pethaps the most dramatic results have been seen in China where, following the dismenting of the large communes and the allocation of what are mostly very small units to individual families (less than 2 ha in most cases), agricultural output has expanded at unprecedented raises. More than gamply redistributing the land was involved. Other factors such as improved pricing and marketing were also present. Many are not aware that the remarkable economic growth in China has been agriculturally led and that the agriculture is based on small holdings operated in most cases by part-time family farmers. The dramatic increases in qural incomes which resulted, led to equally dramatic transformation of the rural economy in many areas. Also, the basis for the remarkable increases in agricultural incomes and production in Taiwan and Kores was tand reform and redistribution:

International research reveals that there are actually few economies of scale to be had in the agricultural production process beyond that amount of land which one family is able to manage, given any one type of technology (say one 60 hp tractor or one span of oxen). The exceptions are with some plantation grops. But even here, the large operations are not now thought to be as essential as was previously thought. Came sugar and the South African experience with the increase in the number of our growers on small, part-time operated farms is an example. Many confuse the scale accounts of processing and marketing agricultural commodates with the actual production process. Moreover, they also tend to confuse the high personal incomes of many large-scale operations with scale according.

Furthermore, size of farm is not a barrier to achieving high yields. One does not used a large farm to be able to achieve the biologically optimum yields. Small farmers the world over have demonstrated this point beyond refine. The reason why yields are often lower on small farms is due to other factors such as constraint of land quality and resources such as labor and capital. But lower yields do no accessfully mean economic inefficiency. Studies in Zimbabwe have confirmed that despite the comparatively low yields achieved by the communal sector farmers, these producers are actually as loss accommically afficient than their large-scale consequents. The reasons for this lie in the technologies used. One is capital intensive using modern technology such as high inputs and mechanization, the other is low input, low cost using labor and ox power.

without consideration of the high transaction costs associated with these institutions. As a result, even though micro-lenders have historically attempted to fill the void left by the inability of normal institutions to cater for marginalized rural households, they lack the capacity to reach the majority of the rural population.

- 190. The institutional impact of these policies has been a lack of appropriate formal financial services in rural areas. The consequence is that the majority of rural people have limited (or no) access to a complete range of financial services from the formal financial sector. The paradox is that the formal sector institutions have the systems, the capital resources and the expertise to operate broadly in financial markets, while the informal sector lacks resources, operates in segmented markets, but has the information needed to make immediate investment decisions.
- 191. Experience in South Africa and elsewhere has demonstrated that the poor can rapidly and cheaply create self-employment if they have access to appropriate credit. A number of clear lessons have emerged from the experience of lending to the rural poor, both in South Africa and internationally. These include:
 - a. accessible, un-subsidized credit can enable the poor to make rapid, significant and sustainable improvements to their income;
 - b. the rural poor require appropriate savings mechanisms such as that provided by the current stokvels and other group saving arrangements;
 - c. eligibility for subsequent loans is a powerful loan repayment incentive; and
 - d. women are the most reliable borrowers.
- 192. Moreover, these lessons and experience have shown that lending to the rural poor requires:
 - a. comparatively expensive personal contact with borrowers by well-trained locally based loan officers;
 - b. efficient delivery of a set of clearly defined, basic products;
 - c. recognition of the complexity of rural financial markets which require a careful choice of the minimum necessary conditions; and
 - d. a self-financing approach which ensures full cost recovery through appropriate interest rates, efficient delivery mechanisms and strict arrears management;
- 193. Rural South Africa is characterized by a thriving, dense and resilient network of informal money lending and borrowing connections. Indeed, trends indicate that the majority of low-income rural households, whether involved in enterprises or agriculture, access informal financial arrangements at some time. Informal credit systems are characterized by easy access due to flexibility of operations and loan terms to meet specific needs; a minimum of red tape; easily understood rules; rapid processing and delivery; and a willingness to handle very small amounts which correspond to the requirements and the capacity of clients. A wide range of borrowers mostly seek short-term financing for an equally wide

range of purposes including household consumption and productive and small business needs. The main constraints on the informal sector is its ability to sustain the credit needs of a growing population and to intermediate the rural surplus.

194. Future rural financial services need to cater for a clientele which. for the most part, see agriculture as being secondary to other needs and activities. In agriculture, the range is from full-time commercial farmers to those who practice agriculture on a small, part-time scale, essentially for household consumption. In addition, credit demand arises from a broad spectrum of non-farm activities. Short-term credit will be the highest priority for almost all types of purposes. Both medium and longer term lending will also be neededespecially for business establishment. agricultural investments such as equipment and livestock, housing, and land purchases.

195. In meeting the needs of rural restructuring it is clear that the current constraints on savings mobilization and lending operations of both the public and commercial financial sectors need to be removed. Moreover, since rural lending will continue to be largely unattractive to the present commercial financial sector, the public sector can play a role in alleviating risk constraints for the commercial sector through such mechanisms as guarantees, information services and some subsidy systems which would serve to lower transaction costs. Experience suggests that government should

Rural Credit: Experience with Group Lending

Group lending offers the possibility of effectively delivering sustainable financial services to the rural poor. As such, it can be a successful mechanism for providing access for individuals who would otherwise find it difficult, if not impossible, to obtain credit other than through informal channels. Group lending, moreover, reduces transaction costs, ensures funds are used for the purposes for which they are borrowed, and reduces the incidence of arrears and bad debts. It also provides the framework for mobilizing savings among the rural poor.

It is critical that groups are formed from homogeneous members with similar interests and objectives. Group borrowing implies joint and several liability for all loans taken by individual members of the group. Failure to meet repsyments reflects on all members who are usually not eligible for new credit until all loans are repaid.

The scheme operated by the Small Enterprise Poundation in South Africa is a case in point. Prospective borrowers form groups of five persons. The group must successfully complete a four week induction and training course which includes regular savings to set up the group's own saving fund. Successful groups receive first loans (R300 each) by electronic transfer to their bank account. Repayments, over 10 two week periods, are equal amounts of the principal plus R1 per R100 borrowed per fortnight, an effective annual interest rate of 46%. Subsequent loans of R800 and R1200 (repayable over a year) are available to graduates of the first loan. The clients are all rural microentrepreneurs, mostly women, of a total of R1.33 million lens so far, only 0.5% of the total portfolio is in arrears. Moreover, savings of R219,000 and average of R149 per borrower have been mobilized.

The Get Ahead Poundation which has been operating since 1984, also operates through groups and individuals. The Poundation is active in rural areas. It promotes the stokvel system (group savings and revolving loans), housing loans and include a free non-financial training and business development program for clients. Most clients are low-income township residents and over 90% are women. The program estimates the creation of about 1500 sustainable new jobs per month. In recent years the program has begun to experience loan repayment problems due to the management information and monitoring systems being unable to cope with the rapid expansion in numbers of clients.

Group lending is also the basis of the highly successful Grameen Bank in Bangladesh. It has been especially successful in improving incomes among disadvantage women's groups in rural areas. Similarly in Malawi, group lending has proved successful in delivering seasonal credit to small farmers, the majority of whom are considered to be in the absolute poverty group. Repayment rates have consistently averaged over 95 %. The Malawi scheme, however, has not included any savings mechanisms and consequently is totally dependent on continuing Government and donor re-capitalization.

refrain from applying targeting and portfolio measures thus restricting the activities and the decision-

making of commercial banks. These measures have failed dismally in countries where they have been applied. However, the state has a responsibility to correct the underlying causes of private sector unwillingness to provide rural financial services, and to improve the credit worthiness of rural people through a favorable policy enabling environment.

- 196. The enabling environment for financial services needs to ensure that micro-finance schemes such as those employed by a number of NGOs are encouraged to expand. These institutions are best structured to replicate, at least in part, the type of services offered by the informal sector. Their sustainability would be improved with removals of interest rate ceilings and the restrictions on their ability to mobilize savings.
- 197. A number of critical principles emerge for developing the financial services appropriate to the needs of the beneficiaries of rural restructuring. These include:
 - a. savings mobilization is an integral part of financial intermediation at all levels; the rural poor especially, have repeatedly demonstrated a strong propensity to save; moreover, the poor have considerable experience with financial transactions through the informal lending sector:
 - b. subsidies, if needed, should not include interest rates but should be aimed at reducing transaction costs for the borrower and to increase client access to services; access (and its cost) is more important to the rural poor than the cost of the credit;
 - c. the sustainability of financial institutions is the basis of successful financial intermediation in rural areas; institutions need to be able to provide a range of financial services;
 - d. rural sector financial institutions should specialize in providing financial services rather than a range of services such as inputs and extension;
 - e. all these principles effect the level of transaction costs and it is crucial that at the operational level, institutions should be efficient, flexible in decision-making, and have ready and rapid access to higher-level decision makers; lending operations and the interface with the clients need to be conducted by well-trained staff who are sensitive to and have an understanding of the socio-economic system of rural households;
 - f. a range of innovative substitutes needs to be developed for lending among the rural poor and to non-specialized groups and individuals; and
 - g. the majority of farmers are women and they have proved to be the most reliable borrowers; any legal constraints on their ability to borrow should be removed.

Other Support Services

Land Appraisal and Feasibility Services

198. Individuals and communities seeking land will need advice and guidance in a range of specialized areas, e.g., location of available land; fair market price of such land; the possibility of subdivision; the

legal process and aspects of purchase; feasible land use and management; income options and possibilities; the total ongoing cost of the proposal including the initial operating and subsistence costs; the means and feasibility of financing the transaction; the possible risks; and so on. This information can be provided by a range of professionals in the private and public sector. For private services, one option would be for the preparation of a list of persons, firms or institutions, who would be accredited to provide professional advice on the various aspects. Such lists might be prepared by the district land committee on the advice of the respective professional societies. What is critical is for this type of advice and service to be available and for the cost of it to be included in any rural restructuring financing program.

PART IV: AGRICULTURAL LAND USE ACTIVITIES AND RURAL LIVELIHOODS

Thusfar, the report has examined options for land reform and principles for supplying administrative needs and support services. There remains, however, a series of critical questions concerning the land-use activities of the newly settled households. Once beneficiaries are given access to land, what are the types of land use activities that they are likely to develop? What would a typical farm look like in terms of area cultivated, area used for pastoral activities, herd size and machinery employed by the household? What would be the value of farm capital (land, livestock and machinery) of the farm? Moreover, given that farming will typically only be a part-time activity for the household, how much of the household's income would derive from farming? How would the household spend its income in the rural economy, and what would that imply for the creation of non-farm jobs in the local economy? What would be the net gain or loss of jobs, if one also takes account of the jobs lost on the large, commercial farms if some of them are replaced by smallholder farms?

200. At this time these questions can only be answered in an indicative way and further research is needed, including in the area of non-agricultural land use. However, models of land reform cannot avoid addressing these questions since the feasibility of the entire exercise hinges on the answers. In order to answer them in an indicative way, a number of models were developed of typical post-reform households.

201. Four case studies were undertaken, yielding a wide range of typical household models, but only four models were ultimately

Small-scale Agriculture and the Environment

Rural restructuring in South Africa raises important questions about the environmental implications of alternative agriculture—with its heavy machinery, its use of chemicals, its monoculture—is the most destructive to environmental resources. This view regards small-scale commercial agriculture—with its emphasis on family labor—as much more environmentally friendly. Others will point out that serious poverty is very often associated with overexploitation of the environment as individuals and families resort to a variety of survival strategies. This view holds that poverty imposes its own time-horizon imperative on farmers and so they cannot afford to worry about the future. As long as small-scale agriculture keeps families in relative poverty, the environment will suffer.

Both views carry some truth, and yet both follow from certain unexamined premises. It is impossible to assert, prima facie, that large farms (or small farms) are better (or worse) for the environment. One must look beyond size to imderstand the complex issues here.

In South Africa the technology of grain production has been mainly large-scale enterprises where expensive equipment—often used but a few weeks out of the year—can be employed on a large number of hectares. This does not necessarily mean, however, that such farms automatically squander soil and water resources. Likewise, intensive agriculture producing vegetables for urban markets may be "small" in comparison to grain farms, but could use chemicals that harm not only the local environment, but the consumers of those vegetables.

The key to environmentally sustainable agricultural policy is to be sure that the incentives upon which farmers operate do not encourage practices that fail to account for the full social costs of agriculture. That principle is true regardless of whether we focus on small-scale agriculture or large-scale agriculture. For example, subsidized prices of agricultural chemicals encourage over-use by both small and large farmers. Subsidized extraction of scarce groundwater renders agriculture unsustainable over the long run, and often imposes serious losses on other sectors as well. Tax policies often encourage mechanization and the purchase of equipment that may not be suited to local agro-ecological conditions.

selected for quantitative analysis. The four models are derived from empirical data on land use, net farm incomes, household size, and agricultural income shares. The models refer to the four agro-ecological

zones for which case studies were undertaken. They are: the summer grains area of the southern Transvaal and the northern Orange Free State; the livestock-dominated areas of the Eastern Cape; the fruit/vegetable/wine areas of the Western Cape; and the periurban vegetable areas around Durban, Pietermaritzburg and Cape Town. The case studies cover 28% of agricultural land and 34% of existing farm jobs (excluding the periurban areas)³. The detailed specification of these models is given in Annex 1.

202. The following themes emerge from the analysis of the models:

- a. The paucity of comprehensive empirical data on small-scale agriculture in South Africa, and the limited number of agro-ecological zones studied, poses obvious limitations to the generalization of the model results.
- b. Nonetheless, the models tentatively predict that a redistribution of land (say 30%) from the large-scale, commercial sector to small-scale, part-time farmers would create a substantial number of rural livelihoods⁴ at acceptable income levels.
- c. The cost per livelihood in terms of land, livestock and machinery-priced at current market values-is surprisingly small.

203. It must be stressed that the indicative models should not be taken to imply that most beneficiaries will, or should, use their land in a particular way after the reform. The models selected here should on no account be used as target or mandatory models driving the planning process of rural restructuring. One of the strongest messages emerging from the case studies was that local control and beneficiary participation in the process of rural restructuring are paramount. All of the case studies placed great emphasis on gaining further insight into potential beneficiaries' views on future options for rural restructuring and the creation of rural livelihoods.

General Principles and Assumptions

204. Large numbers of poor, but often potentially commercial, farm households can obtain reasonably attractive household and employment levels via fiscally affordable land redistribution. This process can

³ In view of time constraints, several important agro-ecological zones and crops were excluded. Some, like the Karoo, are areas of low agricultural potential. Others—e.g., the subtropical areas of Natal and the Eastern Transvaal (fruit, sugar and timber) and the irrigated perimeters—have high agricultural potential. Consequently, the case studies are broadly indicative of areas of medium agricultural potential. Some of the excluded crops, notably sugar and some sub-tropical fruits, are proven by South African and international experience to be especially appropriate for efficient small-scale farming. Overall, the aggregate totals derived from our four models probably reflect approximately average national agricultural potential (and cost of land acquisition per hectare).

⁴ A rural livelihood is defined as a full-time equivalent worker living in a rural household which derives an income form farming activities, from activities directly related to farming (e.g. farm labor, input supply, and output processing and marketing) and from other sources (e.g. business activities not related to farming, wages, remittances, pensions). Two full-time equivalent workers are assumed per household of six persons.

be stable, sustainable, consistent with national (rural and urban) and household food security and help to restrain the speed of rural to urban migration.

- 205. Beneficiary households are not required to rely wholly on farming, nor should they be expected to generate unduly high agricultural incomes. Today, the typical income of a full-time farm laborer appears to be R3,000 per year approximately. It is assumed that an indicative annual income would lie between R5000 and R12,000 for a typical range of post-reform households of six persons, including the value of own consumption⁵ and that between 25% and 75% of this income will be derived from the household's agricultural resources.
- 206. If higher income levels are set, then the number of beneficiaries will be smaller. Of course, some households will seek much higher incomes (or proportions coming from agriculture) at once, and incomes should grow.
- 207. In order to increase net income per hectare and restrain debt burden, post-reform smallholders should be helped to adopt processes that raise output by applying increasing levels of labor with acquired skills, rather than to select products or methods that displace labor by purchased inputs (e.g. herbicides, hired combine harvesters). For the sector as a whole this involves removing existing incentives to increase capital intensity and radical changes in support institutions.
- 208. Stability of rural income will be essential if post-reform communities are to be food secure and creditworthy. Hence restructuring should encourage:
 - a. multiple income sources;
 - b. rotations, crop and/or livestock mixing, and other techniques to reduce farm risk;
 - c. employment in slack seasons and years in public works to increase rural infrastructure;
 - d. appropriate water use (including farmer or community-controlled irrigation).
- 209. To reduce the fiscal burden, while ensuring required support services, the conversion of subsidized services from usage by large to small farmer should not induce extra costs to the state.
- 210. A combination of ecological reality and the preferences of beneficiaries will probably lead to different property rights and relations. The reform process should respect this fact. It may reduce the cost of implementing particular household models, e.g., by renting grazing rights instead of purchasing the full set of land use rights.

The relatively wide range of incomes assumed reflects current local conditions and relatively imperfect labor mobility between zones. It may be argued, however, that post-reform equity objectives should attempt to equalize incomes across regions. More uniform indicative incomes would then be appropriate.

Potential Beneficiaries, Property Relations and Farming Options

- 211. The following broad categories of potential beneficiaries emerged from the various case studies: (i) communities that have traditional tribal origins, or are based on voluntary associations of people such as in the church, labor unions, neighborhoods; (ii) farm workers currently or recently employed, on commercial farms; and (iii) individuals.
- 212. For each of the above categories of beneficiaries, the following range of typical property relations and farming options was identified. The list is not exhaustive and models will adapt to local circumstances.

Communities

Common property model. Under **a**. this model (which should be distinguished from production cooperatives or collectives discussed below), one can envisage a range of arable/pastoral mixes as determined by community preferences and natural resource base. The common area can be held as freehold or leasehold with option to buy under group title. Secure usufruct or freehold rights for individual households can be established for residential and arable land within the area, and common access to pastoral land can be regulated by community rules. Farm sizes will vary considerably and there will likely occur a shift towards more labor-intensive technology. Appropriate levels and forms of support services are essential to accompany this shift. Especially in arid/semiarid areas,

Property Relations in Rural Restructuring

Under the political and economic policies of apartheid it was important to provide secure economic opportunities for white settlers in rural areas. Economic policy in general—and property tax policy in particular—created an incentive for white farmers to hold freehold title in their entire agricultural estate. Given that the fixed cost to the farmer of owning extensive freehold land approached zero, there was a strong incentive to expropriate into the private domain large tracts of kind that in other similar regions of the world carries the name "wasteland."

An essential part of a rural restructuring program is to create alternative property regimes suited to the agro-ecological conditions of a region.

In the higher potential areas of Natal, the Transvaal, and the Orange Prec State, for example, most farms would likely consist of private property. This private estate could be held by an individual farm family, or by several farm families who hold a group title and farmed the land under several alternative enterprise forms, such as individually, cooperatively or as a corporation.

In the more arid regions, such as the Northern Cape and the Karoo, the superior arable lands would surely be held individually, again by individual families or under group title by several families. The extensive rangelands that are necessarily associated with these private holdings could be held under several managerial forms of common property.

Though ecologically distinct from South Africa, the summer pastures of Switzerland are held in common property and used under a variety of managerial regimes. In South Africa these property regimes would likely bear a strong resemblance to customary tenures known in southern Africa since time immemorial.

The burden of a rural restructuring program is to ensure property regimes that will guarantee the sustainability of the agro-ecology of a particular area and the economic conditions.

communities may develop more flexible grazing arrangements with other communities. This will extend the effective pastoral range over larger areas than covered by existing individual commercial farms.

b. <u>Irrigated garden plot model</u>. This model applies to irrigated perimeters that can be adapted to small-scale use. The irrigated perimeter can be held under group lease or freehold by the community. Individual households obtain secure usufruct, freehold or sublease rights to their garden plots, with sizes ranging from 0.05 to 0.25 ha or smaller. Experience suggests a maximum community size of about 100 households.

Farmworker Groups

- a. <u>Improved conventional employment model</u>. This model assumes continued wage employment of the farmworkers on an existing commercial farm. However, farmworkers are assumed to hold secure rights to residence, arable or garden plots, and pastoral land of the farm. Increased labor participation in management decisions and improved access to social services seem prerequisites for the social sustainability of this model. The model is also known as the 'normalized' industrial relations model.
- b. <u>Common property model</u>. Under this model, farmworkers establish common property relations as indicated in the common property model for traditional communities outlined above.
- c. <u>Production cooperative model</u>. This model is based on joint management of the commercial farm enterprise by workers, and joint ownership or lease of land and equipment. Freehold land is held by the members under a group title, or by a corporation in which the members are shareholders. Provision of support services focussing on management skills and the promotion of a shift towards more labor-intensive production is essential. An extensive theoretical and empirical literature on production cooperatives, collectives and labor-managed farms suggests that these farms often suffer from complex incentive problems and are often converted to individual or common property models after a few years.
- d. <u>Equity-sharing option</u>. Under this option, continued wage employment of farmworkers and continued participation of the former sole owner in management and equity is assumed. Participation by farmworkers in management decisions is a prerequisite for profit and equity sharing with respect to land and/or operating company.

Individuals

- a. <u>Irrigated market garden model</u>. This model is likely to emerge in periurban areas, in dense rural settlement or on existing irrigation schemes. It assumes freehold or lease by individuals or groups of market garden plots, and a wide range of plot sizes, production technologies, income levels and degrees of commercial orientation
- b. <u>Outgrower model</u>. The model applies to subdivided or expanded large-scale horticultural or sugar farms. Outgrowers gain access to land under individual or group freehold or lease, while contracting with the "core" farm for the provision of services (e.g. input supply, output marketing, financial management).

c. <u>Commercial smallholder/large scale model</u>. The model is based on conventional private freehold or lease. A wide range of plot sizes, production technologies, income levels and degrees of commercial orientation is envisaged. Support service packages should be developed to assist the farmer in efficient and sustainable farming.

Major Assumptions and Results of Analyzed Models

- 213. Beneficiary households are certainly not required to rely wholly on farming, nor should they be expected to meet unduly high target farm and nonfarm income levels. The report has used several illustrative income levels (that include the value of own-consumption) for typical post-reform households. They are assumed to derive between a 25% and 75% of their income from agriculture, depending on local conditions. This is a considerably higher proportion than is now typical of small-scale farmers in South Africa. If higher income levels are set, then the number of beneficiaries will be smaller, or the fiscal burden greater. Of course, some households will seek much higher incomes at once, and incomes should grow.
- 214. The indicative income levels for which models have been constructed are the following:
 - a. In the Eastern Cape, the income level assumed is R5,000 per household per year—half of which is derived from agriculture. Current farmworkers' annual wages appear to be in the order of R3,000.
 - b. In the Western Cape, the income level assumed is R12,000 per household per year—three quarters of which is derived from agriculture. Current semi-skilled farmworkers' annual wages appear to be about R6,000.
 - c. In the summer grain area, the income level assumed is R6,400 per household per year-roughly the current rural household subsistence income level, with half derived from agriculture.
 - d. In periurban areas, the income level assumed is R9,000 per household per year—reflecting greater income-earning opportunities in periurban areas, and a quarter of income is derived from agriculture.
- 215. The methodology of the modeling exercise is described in Annex 1. Empirically estimated values for basic parameters were used to calculate actual net farm income for each of the four models. Actual net farm income was then compared to indicative net farm incomes. Household models were then rescaled—up or down—to conform to indicative net farm incomes (Annex 1). The basic characteristics of the rescaled models are presented in Table 1.

Variable	E. Cape	Summer grain	Periurban	W. Cape
NFI (R)	2500	3200	2250	9000
NFI/ha	56	180	12341	6178
Farm size (ha)	45.0	17.8	0.2	1.5
Cultivated (ha)	5.5	3.0	. 0	0
Irrigated (ha)	. 0	0	0.2	1.5
Pastoral (ha)	39.5	14.8	0	0
Herd size (LSU)	6.6	3.0	0	." O
Machinery (R)	0	0	456	8740
Main activities	Cattle Maize	Maize Cattle	Vegetables Maize	Winegrapes ⁶ Vegetables

Table 1: Main Characteristics of the Four Indicative Farm Models

Aggregation

216. The models are based on conservative assumptions. The results indicate that when land moves from large to small holdings, there is a substantial net increase in the number of rural livelihoods.⁷ First, this is because farming becomes more labor-intensive. Second, it is because there is a stronger linkage to labor-intensive rural or small-town production of non-farm goods and services. These two effects greatly outweigh the loss of jobs on the larger farms as they are restructured. Moreover, the cost-per-job is surprisingly small.

The following results are presented in Table 2:

- a. gross rural livelihoods (farm and nonfarm) created;
- b. net rural livelihoods created;
- c. net rural livelihoods created under the assumption that indicative household incomes are increased by 20%; and
- d. capital costs to be borne by equity or grants

: >

Winegrapes were selected given data limitations. However, deciduous fruit holds considerable promise for small-scale farming, and appears to be more profitable than winegrapes.

⁷ The details of the aggregation calculations are given in Annex 1.

By far the largest numbers 217. would arise in the periurban model. where a transfer of 50% of the farm land could add an extra 974,000 full time equivalent jobs, i.e. the net additional livelihoods. Transferring 50% of the wine estates in the Western Cape, on the other hand, would generate only about 66,000 This is because the livelihoods. current wine estates already employ a large number of workers at relatively high rural wages, so that the net employment gain from the land transfer would be more limited. However a total of 97.200 workers (the gross livelihoods) would be working on the transferred land and in the corresponding nonfarm rural jobs, supporting a total of 48,600 beneficiary families.

218. The summary results of these convey that a land restructuring process that acquires 10% of commercial farm areas in the four zones mentioned above and redistributes them to smallholdings could establish a total of 187,556 smallholdings at indicative household income-levels of R5,000 to R12,000 per year, depending on the region. Farm sizes necessary to achieve the indicative incomes will range from 0.3 to 45 ha, and the value of farm capital (land, livestock, machinery) is about R9,803 per farm. About 30% of this capital can be rented or borrowed, but 70%-R6,862—will have to come from other It is assumed that the

Compensation for the Costs of Apartheid

Legislation and other racially based activities during apartheid have unjustly imposed costs on the majority of South Africans. It is therefore not surprising that claims for compensation are made.

However, it is not possible for all these claims to be met from the current wealth of those who have benefitted from unjust arrangements. This is for four reasons:

- segregation and apartheid have made the South African economy less efficient than it might have been, so that losses have not been matched by benefits;
- (ii) many of the benefits have been consumed, rather than saved and stored as wealth. Past consumption cannot be redistributed:
- (iii) some of the gains have accrued to foreign owners of South African assets and to foreign consumers of South African goods, and cannot be recovered; and
- (iv) part of the wealth still held by residents of South Africa has been transferred abroad by a variety of means and concealed and, therefore, is not available for redistribution.

Consequently, only a fraction of the costs of spartheid can be recovered in the form of taxation of existing wealth. Much of the compensation, therefore, would have to come from taxes on future income and growth. The relevant questions then are to what extent can taxes be imposed on current wealth and income, and what are the consequences? Excessive taxation will create incentives for increased consumption and transfer abroad. Increased taxation will impose distortions in the allocation of resources, entailing losses in efficiencies. These costs have to be weighed against the benefits of redistribution and will impose limits on how far it is advisable to increase taxes.

Financing redistribution through loans also has its limits. External loans impose a requirement to repay in foreign currency, which is made more difficult by a rise in domestic consumption. The use of domestic loans by the state is limited by consideration of macroeconomic balance; beyond a certain point, interest rates will rise with consequential difficulties for the financing of state debt, and for private sector growth.

It follows that most of the resources necessary to restore many South Africans to the position in which they would have been without an unjust past will have to be generated by economic growth. What is required to do this most rapidly is to create new opportunities for economic participation among those who lack the necessary resources at present. This implies reallocation of public expenditures to put resources in the hands of new producers as effectively as possible.

beneficiary brings in part of these capital costs as equity, and that a rural restructuring program provides the other part as a grant. The capital costs associated with these 187,556 smallholdings is thus R1,287 million.

- 219. These households typically engage in varying degrees of part-time farming depending on the region. Assuming an average household size of six, with the equivalent total of two adults from several of its members, the above redistribution process will involve 187,556 x 2 = 375,112 livelihoods in households that are engaged part-time in farming. Since these households will spend a substantial portion of their income locally, they will generate an additional number of nonfarm livelihoods. It is estimated that for every four part-time farm livelihoods, one additional non-farm livelihood is created. The gross number of livelihoods created is thus 423,877. However, if the number of farm and nonfarm jobs lost on the commercial farms is deducted, the result is a net number of rural livelihoods of 360,620. Consequently, the capital cost per gross and net rural livelihood is R3,036 and R3,569, respectively.
- 220. If 50% of the commercial area in the selected zones (recall that the zones cover 28% of the area of the commercial sector: 14% of the area in the commercial sector is transferred here) were redistributed to part-time farmers, the numbers of gross and net rural livelihoods created are 2.1 million and 1.5 million, respectively. The total capital cost would be R 6.4 billion. If one takes into account that in 1991 the entire commercial agricultural sector employed around 1.17 million laborers on the total agricultural area of the RSA, the estimates presented in this section seem to hold considerable promise.
- 221. The interpretation of the results should take into account that the area under consideration only represents 28% of agricultural land in the commercial sector. On the total agricultural area in the commercial sector, farm employment was estimated at 1.17 million in 1991. The farm jobs on the area covered by the models represents about 34% of total farm employment. A rough estimate in Annex 2 suggests that one could tentatively add another 37% to the gross rural livelihoods reported in Table 2 if all agricultural land were considered.

A sensitivity analysis—in which indicative household incomes were increased by 20%—was also performed. Results show that the number of livelihoods created is reduced by approximately the same proportion as incomes are increased.

Table 2: Rural Livelihoods Gained and Associated Farm Capital Costs

Gross rural livelihoods	gained	Proportion of Commercial Farm Land Transferred Over 5-year Period					
	10%	20%	30%	40%	50%		
Periurban	207,333	414,666	621,999	829,332	1,036,665		
Summer grain	129,744	259,489	389,233	518,978	648,722		
Eastern Cape	67,356	134,711	202,067	269,422	336,778		
Western Cape	19,444	38,888	58,332	<i>77,775</i>	97,219		
Total	423,877	847,754	1,271,631	1,695,507	2,119,384		
Net rural livelihoods ge	nined						
Periurban	194,733	389,466	584,199	778,932	973,665		
Summer grain	96,601	193,201	289,802	386,403	483,003		
Eastern Cape	56,142	112,283	168,425	224,566	280,708		
Western Cape	13,144	26,288	39,432	52,575	65,719		
Total	360,620	721,238	1,081,858	1,442,476	1,803,095		
Sensitivity analysis: ind	licative household inc	ome increased by	20%_				
Periurban	160,178	320,355	480,533	640,710	800,888		
Summer grain	74,977	149,953	224,930	299,906	374,883		
Eastern Cape	44,916	89,831	134,747	179,663	224,578		
Western Cape	9,903	19,806	29,710	39,613	49,516		
Total	289,974	579,945	869,920	1,159,892	1,449,865		
Capital costs (R million	<u>15)</u>						
Periurban	147	294	441	588	735		
Summer grain	507	1,014	1,521	2,028	2,534		
Eastern Cape	444	889	1,333	1,778	2,222		
Western Cape	189	378	567	755	944		
Total	1,287	2,575	3,862	5,149	6,435		

Note: The models assume that rural livelihoods are based on part-time farming. One could roughly calculate the full-time farm equivalents by the part-time farm equivalents by the household multiplying income share derived from farming. The farm income shares are 0.25 in the periurban areas, 0.50 in the summer grain areas and the Eastern Cape, and 0.75 in the Western Cape.

222. The results presented in this section are based on available empirical work on smallholders in South Africa. However, the quality and coverage of the existing data on smallholders leaves much to be desired. More work is needed to extend the coverage of the models to additional agro-ecological zones and to confirm the hypotheses and assumptions that underlie the models presented here. More work is also needed on models of rural, non-agricultural livelihoods.

THE ESTIMATED COST OF A RURAL RESTRUCTURING PROGRAM

In the last section, data on South African small-scale farmers were used to derive several important cost elements: (i) the area of land and the livestock and machinery they would have to own in order to earn a livelihood which would be sufficient to provide them with the incentive to settle or remain in rural areas and engage in farm and associated nonfarm production; and (ii) the net number of additional farm and nonfarm households which could be accommodated on the land base for which these models could be applicable. In this section, the estimated cost of a rural restructuring program is calculated as follows. First, the nonland cost components are discussed: (i) the administrative and legal costs which would arise in the restitution and redistribution components of the program are estimated; and (ii) the infrastructure and startup costs to settle beneficiary households on the land are estimated. Second, the cost and pace of a nationwide program are discussed. A tentative extrapolation is made from the regions studied to the potential costs of a nationwide program which would also include the land classes and regions for which the necessary data for farm modelling are not yet assembled. On the basis of this extrapolation, the order of magnitude of the costs involved in a nationwide program is provided, and an estimate of the likely pace of implementation is given. Third, the options are discussed which exist to reduce the fiscal costs of the restructuring program, and to defer them into the future, so that they can eventually be paid out of the growth dividends which are likely to be associated with a peaceful and well-managed transition. Finally, options for financing part of the program out of foreign resources are discussed.

Table 3. The Cost of an RRP Program for the Case Study Regions

Proportion of Commercial Farm Land Transferred Over 5-year Period 40% 50% 10% 20% 30% (1) Net livelihoods 360,620 721,238 1,081,858 1,442,476 1,803,095 (2) Gross livelihoods 423,877 847,754 1,271,631 1,695,507 2,119,384 (3) No. of families 211,939 635,816 847,754 1,059,692 423,877 (4) 3,814,893 6,358,152 No of persons 1,271,631 2,543,262 5,086,521 (R millions) (5) Cost of farm capital 1,839 3,679 5,517 7,356 9,193 (land, livestock and machinery) (6) borrowed 552 1,104 1,655 2,207 2,758 (7) paid by beneficiaries 368 736 1,103 1,471 1,839 (8) 919 3,678 paid by grant 1,839 2,759 4,596 (9) Dissemination & 944 944 944 944 944 administration costs (10)Infrastructure 1,590 4,006 6,008 8,011 10,014 (11)· incremental RRP 795 2,003 3,004 4,006 5,007 Health/edu (12)413 827 1,240 1,653 2,066 infrastructure (13)incr. for RRP 207 69 138 276 344 (14)Start-up grants 1,102 2,204 3,306 4,408 5,510 (15) All capital cost 5,474 10,832 15,776 20,719 25,661 (16)incremental RRP 4,748 8,967 12,978 16,989 20,999 (17)paid by beneficiaries 368 736 1,103 1,471 1.839 (18)borrowed 552 1,104 1,655 2,207 2,758 (19)paid by government 3,829 7,128 10,220 13,311 16,402 (20)Conting. 20% of (16) 950 1,793 2,596 3,398 4,200 (21)(19) + (20)4,779 8,921 12,815 16,709 20,602 **(R)** (22)Cost/gross livelihood 11,274 10,524 10,078 9,855 9,721 (23)Cost per family 22,547 21,047 20,156 19,710 19,442 Cost/net livelihood (24)13,251 12,370 11,846 11,584 11,426

Cost Components

- 224. Table 3 shows the costs of a rural restructuring program for the case study regions defined above. The costs are estimated for a five-year period using five different scenarios. The scenarios assume that between 10 and 50% of commercial farm land is transferred to beneficiaries.
- 225. In Table 3, it can be seen that the net number of farm and nonfarm livelihoods generated (rows (1) and (2)) by transferring between 10% and 50% of the commercial farm land in the four study regions (not the whole country) to beneficiaries. In the next row (3) the corresponding number of families is shown, assuming two full-time equivalent workers per households. These could consist of two adults working full time, or of a single head of household working full time, an older relative working half time, and the balance of labor requirements provided by older children during weeks and days that school is not in session. Assuming about six persons per household there could be a maximum of 6.4 million beneficiaries in these regions (row (4)).
- 226. Detailed cost assumptions are given in Annex 4, and are summarized in Table 3. In row (5) it is shown that the total farm capital (land, machines, livestock) of these households would be about R9 billion, of which 30% would be from resources borrowed by the households (row (6)), 20% from their own equity contributions (row (7)) such as the animals tools and implements the households would bring with them from the former homelands, and any contributions to the capital fund they might have made in cash or through labor contributions. The remaining 50% of the farm capital costs would be financed by a grant (row (8)). This implies that each household would have a debt-asset ratio not exceeding 30%, so that it remains credit-worthy for future borrowing of working capital and additional productive investment.
- 227. Row (9) shows the costs for land administration and adjudication of the program. It finances training workshops of two and a half days for a third of the adult rural population (spread over a total of 10,000 workshops), the training of the trainers and the teaching materials in the local languages. It also includes the costs of operating for five years a total of 250 district land committees, a national land committee and 25 land courts. This cost is treated as a fixed cost irrespective of the number of beneficiaries, and unlike the other costs includes the cost of land adjudication and administration nationwide for both the restoration and the redistributive processes, and for regularizing land which has been occupied by squatters. This cost is estimated at a little less than R1 billion. Since the existence of this system is likely to substantially reduce the litigation costs of private parties, it is not a social cost, but only a fiscal cost.
- 228. In row (10) the cost of providing the net additional households with basic infrastructure is estimated: electricity, safe-piped water supply, basic sanitation and the upgrading of the on-farm road network. This cost is about R10 billion, a little higher than the cost of farm capital. However, not all of these costs are chargeable to a rural restructuring program. It is assumed that 50% of the gross beneficiary households would have to be provided with this infrastructure, even if they were to remain in the former homelands or in urban areas, and therefore only 50% of the infrastructure costs are charged as an incremental cost to a rural restructuring program. For health and education infrastructure, it is assumed that the households and children would have to be provided with additional classrooms and health posts irrespective of whether they would move to new farms or stayed in the bantustans or the urban

areas. It is therefore assumed that only the extra cost associated with wide dispersal is chargeable to a rural restructuring program. This is assumed to be an additional 20% of the normal costs, or R344 million.

- 229. In row (14) the cost of startup grants is shown covering most of the cost of feasibility studies and surveys for the farms acquired by the beneficiaries, a portion of the living costs and farm inputs during the first year and some construction materials that the beneficiaries can use to start the construction of their housing. Both the infrastructure and the grants provided are for basic but adequate services and inputs. For example, the beneficiaries are assumed to provide their own labor for housing construction.
- 230. No research, extension and technical assistance costs are included because they would have to come from redirecting the expenditures of existing programs for the large commercial farm sector to the smallholder sector. The recurrent health and education costs are also independent of the location of the beneficiaries and the extra cost associated with greater dispersal of the population is negligible. All other recurrent costs are private costs of the beneficiaries or maintenance costs of their infrastructure for which they themselves should be responsible, rather than the state.
- 231. In row (15) it is estimated that costs for all capital items, for a program which would transfer 30% of the land in five years would be about R16 billion in 1993 prices, of which R13 billion would be directly chargeable to a rural restructuring program. The beneficiaries would pay a little—about 8.2%—of the incremental rural restructuring program costs and would borrow an additional 12.3%. This would leave a total fiscal cost of about R10 billion. All of the contingencies are added to the government cost, which is assumed to be 20% of the total incremental capital cost of a rural restructuring program. This raises the government cost to about R13 billion. Per beneficiary household the government's upfront cost is about R20,000. Per net permanent job or livelihood created the cost is only R12,000, which not only includes most of the cost of productive capital, but also all of the incremental social and economic infrastructure required. Consequently, the program is able to create a large number of livelihoods at relatively low unit cost in fiscal terms. Moreover, the resources required from the financial sector per job created are also minimal.
- 232. One major conclusion emerges from this analysis. The farm capital costs are only about 45% of the total costs, while the land costs (at current market prices) are even less. Clearly, in this light the concern over the cost of compensation for the land loses some of its urgency. Instead, the concern shifts to how to finance the startup grants, infrastructure costs and administrative costs. Finally, while beneficiaries are assumed to finance about 50% of the farm capital from their own equity or loans, their participation in the total costs is assumed to be only about 20%.

Cost and Pace of a Nationwide Program

233. Cost. Despite its low unit cost, the size of the program could still create a substantial macroeconomic and fiscal financing problem. First of all, the calculations above are only for four farming systems in four subregions. However, interest in settlement in low fertility and high risk areas such as the Karoo will be limited. On the other hand, the highest quality lands have also not been included in the above calculations. These include the sugar sector, most of the deciduous fruit sector, the citrus sector, and the irrigated field crop sector, as well as the wheat, barley and out growing areas.

Using insights gained from the models, a very rough guess was made at how many livelihoods could be created by transferring 30% of the excluded areas. The assumptions are given in Annex 2 and come to about 400,000 additional net jobs, bringing the total to about 1.5 million. We use these very rough calculations to blow up all the cost estimates in Table 3 (row 21) by a factor of 1.37 for the 30% option, bringing the total government cost to R17.5 billion. The total five year fiscal cost of the program is thus R17.5 billion.

- 234. Pace. What would be the maximum pace at which such a program could be implemented? Currently the annual rate of transfer of land in the commercial sector is about 4%, with a maximum observed in the past of 6.7%. About half of these transactions were intra-family transactions, so the land market has been able to transfer to unrelated owners close to 3.5% of the land of the commercial farm sector per year in the past. If all the measures to encourage sales discussed above were implemented it seems reasonable that this figure could be doubled. Furthermore the removal of restrictions on the subdivision of land and the purchase by the disenfranchised would multiply the number of potential buyers. The land committees and land courts would expedite the restoration process and assist in monitoring and dispute resolution for the entire process.
- 235. It would, therefore, not be unreasonable to assume that 6% of the land of the commercial farm sector could be transferred in every year of a program. This would lead to a total transfer of 30% of the medium and high quality land of the commercial farm sector over 5 years, with a total of around 1.5 million net permanent jobs created. In this calculation it is assumed that most of the beneficiaries of restitution would be accommodated and most of the rural squatter settlements would be regularized and upgraded. This would mean that slightly more than 5% of the 30% transferred would have been associated with judicial and administrative, rather than with market-assisted processes. It is assumed that the unit costs of these transfers would be about the same as those for the market assisted transfers. The tentative nature of all of these calculations must be strongly emphasized.

Options for Reducing and Deferring the Fiscal Burden

236. If the government were to pay for all the above costs out of current fiscal resources, the annual fiscal burden of a rural restructuring program which transfers 30% of commercial farm land to beneficiaries would be about R3.5 billion per year. To this would be added a borrowing requirement from the banking sector of the cost borrowed by the beneficiaries of about R450 million per annum bringing the relevant total resource requirement to about R4 billion per annum. It would obviously be highly desirable to reduce these costs, shift them to foreign or domestic donors, or defer them in time until growth has increased the fiscal capacity of the nation. What are the options to do so? The options are summarized in Table 4.

⁹ At this annual rate, i.e., 4%, the indicative models described in the pervious section suggest that: (i) in periurban areas, about 83,000 gross rural livelihoods could be established; (ii) in the Eastern Cape, 27,000; (iii) in the summer grain area, 52,000; and (iv) in the Western Cape, 7,800. This gives a total of about 170,000 gross livelihoods or 145,000 net livelihoods per year.

Table 4: Savings on Fiscal Costs

	Options	Cost per year
(1)	Total costs payable by Government without any savings option	R3,500 million
(2)	Sale of state land	R50 million
(3)	Increased copayment (rejected)	-
(4)	Reduction of start up grants (rejected)	-
(5)	Sweat equity (held in reserve)	(R200 million)
(6)	Pension/buyout scheme	R280 million
(7)	Grant resources	R550 million
(8)	Elimination of current subsidies to agriculture	R400 million
(9)	Land reform bonds	-
(10)	Regularizing land invasions (not cheaper)	
(11)	Total ((1) - (2) - (6) - (7) - (8))	R2,220 million

- 237. Sale of State Land. The first option would be to either sell all of the unoccupied arable land which is in the state sector, or to use it for direct redistribution in the first years of the program. Either way a reduction of the fiscal cost would result. Currently, about 320,000 hectares of arable state land remain unoccupied. Valuing these at R800 per hectare leads to an estimated sales value or fiscal savings of about R256 million, or approximately R50 million per year. Clearly neither the fiscal nor the land redistribution problem can be solved in this way.
- 238. Copayment. The second option would be to raise the copayment requirement of the beneficiaries. Since beneficiaries would have to borrow the amounts domestically, such a shift would neither change the social cost of the program nor its macro-economic impact on the capital market. This option would only reduce the fiscal cost. Moreover it would increase the debt-asset ratio of the households and enterprises created, reducing their creditworthiness for the future and making them more vulnerable to drought and price risk. The likely effect of this would thus be to create yet another subsidy-dependent farm sector, this time a small rather than a large farm sector. It would simply amount to a deferral of the fiscal cost to the future bailout operations. Moreover, there are better alternatives for shifting the budget costs to the future. Therefore, it seems essential to maintain a debt-asset ratio of 30% as originally assumed.
- 239. Reduction of start-up grants. A reduction of start-up grants is also not recommended, since, apart from creating real difficulties for the program participants in their first year, it is likely to reduce the quality of the feasibility studies, with adverse impact on environmental and economic sustainability of the resulting settlements and increase the debt/asset ratios of the resulting enterprises above the indicative 30%. Again, it will only reduce the future creditworthiness of the beneficiaries and shift the fiscal cost to the future.

- 240. "Sweat equity". A more realistic cost reduction would result from requiring the beneficiary communities to contribute for free the unskilled labor costs and local materials for building the economic and social infrastructure. In the highly successful Solidaridad program of Mexico beneficiaries provide between 20 and 50% of the infrastructure costs in this way, depending on the project type. Requiring an average 25% of "sweat equity" from the beneficiaries would reduce the governments fiscal costs by a little more than R1 billion in total or about R200 million per year. The only disadvantage of that option is that it would reduce the labor earnings created by the boom in rural infrastructure construction, and therefore the transitory impact of the program on employment. A decision on whether or not to reduce the cost of the program in this way would therefore depend on the unemployment and labor income situation prevailing at the time of implementation. The option therefore is held in reserve.
- 241. <u>Pension/buyout scheme</u>. Another cost reduction option, which is capable of shifting the fiscal cost to the future, is the pension/buyout scheme discussed earlier. As a starting point, assume: (i) that pensions consist of two-thirds domestic currency, and are linked to the real value of government pensions, and one-third is foreign exchange; and (ii) that the payment of the pension is guaranteed by a third party insurer. Under these circumstances, farmers mights be willing to sell their land and other agricultural assets for a present value of pension benefits which is substantially below the cash price of the land.
- 242. Assuming a 20% discount on about half of the farm asset cost payable by the state, this would reduce the total fiscal burden by about R75 million per year. Since beneficiaries are assumed to pay 50% of the farm assets from own equity and credit they would also accrue a savings of R75 million, bringing the total to R150 million. Thus the real cost savings would not be that large. However, if the pensions were on average payable over 15 years, it would reduce the annual fiscal cost over the first five years by R278 million (Annex 3). The pension scheme can, in this way, be interpreted as a loan from the sellers to the redistribution program.
- 243. Grant resources. Additional real cost reduction, rather than deferral, could only be achieved by raising grant resources for the program from foreign and domestic donors. It should be possible to raise up to USD150 million per year, or of the order of R500 million from foreign sources and perhaps R50 million from domestic resources. Such grants could be in the form of government-to-government grants, or arise from private domestic and foreign donations to community groups and NGOs which could assist the beneficiaries in a variety of ways.
- 244. <u>Elimination of current subsidies</u>. Current remaining subsidies to the commercial farm sector are about R500 million per annum. (These do not include the research and extension costs which will also have to be redirected to the small farm sector). It is assumed that of this amount about 400 million can be eliminated over the short run.
- 245. The sum of fiscal savings so far considered amounts to a reduction of total fiscal cost to about R2.2 billion per year. This might still not be fiscally affordable at this time. Further deferral options need therefore to be considered.
- 246. <u>Land reform bonds</u>. Consider first the option of land reform bonds. In other countries, these have often been forced on the current owners as payment of compensation. Due to unfavorable features such as limited transferability, low interest rates and high inflationary expectations, these bonds have

traded at considerable discounts or not at all. Moreover, the former owners anticipated the implementation of these devices and this fuelled their resistance to redistribution and their efforts at litigation in order to prevent the expropriation of their farms. Bonds which do not contain such adverse features could be used to pay the current owners, and have the same deferral effect as the pension scheme. Since they would have to be fully tradeable on the domestic capital market, unlike the pension, they would be indistinguishable from the issuing of any other government bonds in the domestic market and have the same fiscal and macroeconomic effects. If crowding out of other borrowing in the domestic market is to be avoided, issuing of domestic bonds to finance a rural restructuring program is undesirable. Moreover, we have seen that a pension scheme can achieve the objective of borrowing from the former owners, through the use of land reform bonds.

- 247. Regularizing land invasions. The assumption that about 30% of the medium to high quality land of the commercial farm sector could be transferred within 5 years is quite optimistic. It would mean that within ten years somewhat more than 50% could be transferred, exceeding the transfers achieved in the highly successful Mexican land reform program. While requiring strong political commitment and imposing exacting coordination and execution requirements, such a rapid pace of transfer might be advisable, given the risk that failure to transfer via the judicial and redistributive components would lead to land invasion.
- 248. Transfer by invasion which has occurred prior to the initiation of a rural restructuring program does of course not reduce the eventual fiscal costs, since the owners of the invaded farms would have to be compensated, and the invaders will claim state assistance for infrastructure and productive support programs. Transfer by invasion after the initiation of a rural restructuring program would of course result in some penalties, such as denial of development and service assistance. Nevertheless even these invasions are likely to result ultimately in compensation and infrastructure development cost. Apart from not reducing the fiscal costs, transfer by invasion would certainly reduce the quality and sustainability of the resulting settlements, reward the daring at the expense of the weak, increase the cost in terms of violence, and lead to reduced investment in the remaining commercial farm sector and perhaps the economy as a whole.

Foreign Borrowing and Grants

- 249. This leaves foreign borrowing from multilateral, bilateral and commercial sources. Commercial foreign borrowing could be made cheaper and more plentiful by an insurance scheme or bilaterally funded guarantees against political risks. Multilateral loans and bilateral loans, some of the latter perhaps at partially concessional rates, should not be very hard to obtain for a program with the enormous potential impact on employment and poverty reduction as a rural restructuring program. It would not be unreasonable to assume that perhaps half of the remaining annual requirement of R2.2 billion could be deferred this way, leaving a fiscal burden of about R1.1 billion or USD 300 million per year for the initial five years of the program. It would not make much sense to seek the deferral of much more of this cost, since it might lead to excessive foreign debt accumulation over time.
- 250. The mobilization of external grant, political risk guarantees, and loans from multilateral, bilateral and commercial sources offers plentiful opportunities for creative design and coordination of the different financial instruments involved. Indeed interesting financial engineering problems need to be solved. This

requires that a single office, perhaps in the Central Bank or Ministry of Finance, be entrusted with the task of coordinating all the bilateral, multilateral and commercial funding sources. It might also be possible to enlist a multilateral agency such as the United Nations Development Program, the European Economic Community, the African Development Bank, or the World Bank to assist in these coordination efforts and to form a donor and lender consortium. It is anticipated that any international financing consortium would make its support conditional on the adoption of an appropriate national legal framework for land, water, and rural development on agricultural policies which create a level playing field for all farm size groups, and a system for local and district implementation of a rural restructuring program which supports fiscal autonomy, accountability and participation of the poor in the decentralized local and district institutions in charge of implementation. A consortium would also be likely to make continued flow of funds over the lifetime of the program conditional on sound implementation, availability of the domestic fiscal resources for the program, the maintenance of the poverty alleviation and employment focus, and on monitoring of economic and environmental sustainability.

•

.

Annex 1: Modeling Exercise

- 1. In this annex, the methodology used to arrive at the indicative models is explained in detail. The Eastern Cape model is presented as an illustration (Table 1). The other models are available upon request.
- 2. The model can be decomposed into the following parts:
 - a. assumptions used;
 - b. empirical model, derived from actual data;
 - c. net farm income calculation for empirical model;
 - d. indicative net farm income model, yielding the rescaled model;
 - e. net rural livelihoods calculation.
- 3. <u>Assumptions</u>. Some of the assumptions about basic agricultural parameters are the following. The rate of return on livestock assets, taking into account all cash and noncash forms of income is assumed to equal 34% per year (Tapson, 1990:147-167). Stocking rates vary from 5 ha/LSU in the summer grain area to 6 ha/LSU in the Eastern Cape. Average physical yields of unirrigated maize range between 0.48 tons/ha in the Eastern Cape and 1.36 tons/ha in the summer grain area. These conservative estimates take into account the frequent occurrence of drought years.
- 4. Farm households' sustainable debt-burden on assets (land, livestock, and machinery) is assumed not to exceed a 30% debt-asset ratio, indicative of a relatively risky agricultural environment. This is consistent with international and local norms (SAAU, 1984:56). The debt-asset ratio is applied to total asset value of land, capital, and machinery. Given a 30% debt-asset ratio, the remaining 70% of asset value represent the capital cost of the models. It is assumed to come from a combination of own equity or grants—no assumption on the actual source of capital cost is made in the modeling exercise.
- 5. The imputed cost of servicing the 30% of assets that are encumbered by debt are calculated as follows. For land and livestock, which account for the bulk of farm capital, empirically observed rental rates from South Africa are used (Kirsten, 1993, and Nieuwoudt, 1993). They vary between 5 and 7%, depending on the region. In the case of machinery, current commercial rates (15%) are applied.
- 6. Capital cost does not include provisions for the cost of housing and rural infrastructure. Households are assumed to build their own houses or to occupy existing houses. The costs of provision for public rural infrastructure (e.g. water supply and roads) are estimated elsewhere.
- 7. International evidence suggests that farm-nonfarm multiplier vary approximately from 1.3 for typical sub-Saharan subsistence agriculture with low population densities and undeveloped rural infrastructure to 2.2 in modern agricultural regions as can be found in the USA (Hagblade et al., 1991). Given the South African situation, a multiplier of 1.6 was assumed. The multiplier is "real" rather than inflationary, given high levels of unemployment and underemployment in South Africa. It can be shown that a multiplier of 1.6 implies that for every farm livelihood created, 0.26 nonfarm rural livelihoods will also be created.
- 8. Assume specialized farm households exist and permanent laborers do not exist in our rural economy. We do not take into account rural-urban linkages. Assume furthermore an indicative income

for farm and nonfarm households of R5,000. Since half of this is derived from agriculture, the net farm income is R2,500; remittances are a quarter of income, i.e. R1250. This yields a total of R3,750 to which the multiplier of 0.6 for rural-nonfarm linkages should be applied. This value, i.e. R2,250, should be distributed over the portion going to the farm household, for which we had assumed that a quarter of income was derived from nonfarm activities, i.e. R1,250, and the portion going to the nonfarm household-the remainder, i.e. R1,000. Since the nonfarm household is assumed to receive three quarters of its income from farm-nonfarm linkages (the R1,000 just calculated) and a quarter of its income from remittances (i.e. R333.33), the nonfarm household earns a total of R1333.33. If the indicative income for this type of household is also R5000, then the farm household supports effectively R1,333.33 divided by R5,000, or 0.26 nonfarm households.

- 9. <u>Net Farm Income</u>. The definition of net farm income used in our models is the following. It consists of gross revenues less purchased inputs, purchased labor, depreciation and capital service charge on machinery, and the rental rate on the portion of capital that is borrowed. Net farm income can thus be interpreted as the economic return to the household's owned resources (labor and the portion of capital assets unencumbered by debt). This figure is different from farm profits, which would be arrived at by subtracting the opportunity costs of owned resources from net farm income.
- 10. <u>Indicative Net Farm Income</u>. The net farm income derived above is now compared to the indicative net farm income (see Assumptions). A rescaling factor is calculated which resizes the empirical household to match the indicative income level. The rescaled values are compared to the original values, and an ex-post consistency check is done. This is particularly important in the case of labor requirements. If the rescaled model would yield labor requirements that vastly exceed the household's own labor capacity, the household would need to hire additional laborers. Only in the case of the periurban areas did such a situation occur, and we needed to iterate back to the empirical case and add costs for hired labor. In the other regions, rescaled values seemed well within the household's labor capacity, taking into account some underemployment.
- 11. This component closes with an estimate of farm capital cost (70 percent of total cost).
- 12. For each of the agro-ecological zones studied, the aggregate net impact of a land redistribution process which would incrementally replace currently existing farm units in the commercial areas by the indicative models arrived at above is evaluated as follows:
 - a. availability of arable and non-arable land in the commercial sector is calculated using official statistics (Eastern Cape, summer grain, and Western Cape) or a rough estimate (in the case of periurban areas);
 - b. land redistribution is assumed to range between 10 and 50% of land availability;
 - c. indicative models replace currently existing commercial farms as land is redistributed, taking into account arable and nonarable land constraints;
 - d. gross rural livelihoods created (farm and nonfarm) are calculated;
 - e. rural livelihoods lost (farm and nonfarm) in the commercial sector are calculated;

- f. net rural livelihoods gained are calculated by subtracting livelihoods lost in the commercial sector from gross rural livelihoods; and
- g. capital costs of the establishment of farm households are calculated, representing 70% of farm capital assets (land, livestock and machinery).

Table 1: Eastern Cape Model

		Eastern Cape	2
<u>Assumptions</u>		Source	
Income	5000		
Net Farm Income	2500	permanent ag.	laborer wage
Debt-asset ratio	0.3	SAAU (1984);	international
Land rental rate	0.05	Kirsten (1993)	1 2
Farm-nonfarm multiplier	0.6	Haggblade et a	l. (1 99 1)
nonfarm livelihoods cr.	0.26		
farm household			
farm income share	0.5		
nonfarm income share	0.25		
remittance income share	0.25		
nonfarm household			
nonfarm income share	0.75		
remittance income share	0.25		
stocking rate (ha/LSU)	6	Antrobus (1993	3:12)
income from livestock	0.34	Tapson (1990)	
Empirical Model		Tapson	
		(1993)	
	A	Th. *	
Warran balda da	Quant.	<u>Prices</u>	Values
Household size	6	<u>Prices</u>	Values
adult-eq. ratio	0.333333	Prices	Values
adult-eq. ratio Adult-equivalents	6 0.333333 2		•
adult-eq. ratio Adult-equivalents Cultivated area (not irr.)	0.333333 2 5	<u>Prices</u>	3500
adult-eq. ratio Adult-equivalents Cultivated area (not irr.) Irrigated area	0.333333 2 5 0	700	3500 0
adult-eq. ratio Adult-equivalents Cultivated area (not irr.) Irrigated area Non-cultivated area	6 0.333333 2 5 0 36		3500 0 12600
adult-eq. ratio Adult-equivalents Cultivated area (not irr.) Irrigated area Non-cultivated area subtotal land	6 0.333333 2 5 0 36 41	700 350	3500 0 12600 16100
adult-eq. ratio Adult-equivalents Cultivated area (not irr.) Irrigated area Non-cultivated area subtotal land Cattle herd size	6 0.333333 2 5 0 36 41 6	700 350 700	3500 0 12600 16100 4200
adult-eq. ratio Adult-equivalents Cultivated area (not irr.) Irrigated area Non-cultivated area subtotal land Cattle herd size small livestock	6 0.333333 2 5 0 36 41 6	700 350 700 80	3500 0 12600 16100 4200 1360
adult-eq. ratio Adult-equivalents Cultivated area (not irr.) Irrigated area Non-cultivated area subtotal land Cattle herd size small livestock poultry	6 0.333333 2 5 0 36 41 6	700 350 700	3500 0 12600 16100 4200 1360 0
adult-eq. ratio Adult-equivalents Cultivated area (not irr.) Irrigated area Non-cultivated area subtotal land Cattle herd size small livestock poultry subtotal livestock	6 0.333333 2 5 0 36 41 6	700 350 700 80	3500 0 12600 16100 4200 1360
adult-eq. ratio Adult-equivalents Cultivated area (not irr.) Irrigated area Non-cultivated area subtotal land Cattle herd size small livestock poultry subtotal livestock Machinery	6 0.333333 2 5 0 36 41 6	700 350 700 80	3500 0 12600 16100 4200 1360 0 5560
adult-eq. ratio Adult-equivalents Cultivated area (not irr.) Irrigated area Non-cultivated area subtotal land Cattle herd size small livestock poultry subtotal livestock Machinery Total asset value	6 0.333333 2 5 0 36 41 6	700 350 700 80	3500 0 12600 16100 4200 1360 0 5560
adult-eq. ratio Adult-equivalents Cultivated area (not irr.) Irrigated area Non-cultivated area subtotal land Cattle herd size small livestock poultry subtotal livestock Machinery	6 0.333333 2 5 0 36 41 6	700 350 700 80	3500 0 12600 16100 4200 1360 0 5560

land			11270	
livestock			3892	
machinery			0	
aubtotai			15162	
Net Farm Income				
Revenues				
Crop sales (maize, 80kg)	22.5	34	765	
Own consumption (bags)	7.5	90	675	
Own consumption beans (kg)	75	2	150	
Livestock			1890.4	•
subtotal revenues		:	3480.4	
Costs				
purchased inputs			776	
purchased labor			100	
indebted land value (33.3% of total	assets)			2166
imputed rental on total capital stock			324.9	
imputed rental on land				108.3
subtotal costs	•		1200.9	
net farm income			2279.5	
net farm income per ha			56	
Indicative net farm income model				
rescaling factor			1.096732	
Household size			6.58	
Adult-equivalents			2.19	
Cultivated area			5.48	
Non-cultivated area			39.48	
total area			44.97	
Cattle herd size			6.58	
small livestock units			18.64	
poultry units			0.00	
Machinery				
Capital cost (own equity or grant)			16628.65	
land			12360.17	
livestock			4268.48	
machinery			0	
Net rural livelihoods				

Total agricultural land Eastern Ca	ре		11255000		
arable land (irrigation&dryland)			702000	`.	
pastoral land (est.♮)			10553000		
Land availability (%)	0.1	0.2	0.3	0.4	0.5
farms (arable constraint)	12802	25603	38405	51207	64008
farms (nonarable)	26728	53457	80185	106914	133642
Farm capital costs (equity or gran	t) R million				
Land	330	661	991	1321	1652
Livestock	114	228	342	456	<i>5</i> 70
Machinery	0	0	0	0	0
total (R million)	444	889	1333	1778	2222
rural livelihoods	53457	106914	160370	213827	267284
nonfarm livelihoods	13899	27798	41696	55595	69494
total	67356	134711	202067	269422	336778
number of black and coloured far	mworkers in Eastern	n Cape		•	
89000					
farm livelihoods lost	8900	17800	26700	35600	44500
nonfarmlivelihoods lost	2314	4628	6942	9256	11570
Net livelihoods gained	56142	112283	168425	224566	280708

Annex 2: Estimate of the Possible Number of Gross Rural Livelihoods in Areas not Covered by the Four Case Studies

1. The numbers reported in Table 2 are <u>not</u> national aggregates—they are estimated aggregates of the four areas studied, which covered 28% or 24 million ha of agricultural land in the commercial sector of the Republic of South Africa. A total of 62 million ha was excluded. In order to arrive at an educated guess of the potential gross rural livelihoods to be created on the area excluded, the following rough estimates were made.

land use	area suitable for small-scale agriculture	indicative smallholder farm size	potential number of smallholders
	(ha)	(ha/farm)	(number)
forestry on arable land (Transvaal)	300000	25	12000
forestry on arable land (Natal)	400000	25	16000
sugar	373000	2	186000
deciduous fruit	48000	1	48000
citrus	46000	1	46000
subtropicals	22000	1	22000
wheat	1500000	25	60000
sorghum, sunflower, soybeans, groundnuts	870000	25	35000
oats and barley	968000	35	27600
cattle	12500000	75	160000
smallstock	37500000	500	75000
total	54527000		687600

Notes:

⁽i) total area under forestry is around 1.5 million ha, but only high potential arable land under forestry is considered here.

⁽ii) vegetables (130,000 ha) are assumed to be already covered in the periurban case-study (150,000 ha). Adding even more vegetable production would result in considerable over-production.

^{2.} If one assumes that 30% of the above land could also become available for redistribution, the number of smallholdings created would be 206,280. This implies 466,192 gross rural livelihoods on top of the 1,271,631 already calculated in Table 2. The "national" estimate of gross rural livelihoods created if 30% of all land suitable for small-scale agriculture in the commercial sector is redistributed to smallholders can thus be roughly estimated at 1,737,823. This implies that an additional 37% could be added to the reported estimates of gross rural livelihoods.

3. We estimate that the farm capital (land, livestock, and machinery) will on average be around R36,000 per farm. This implies that the capital cost to be borne by own equity or grants is R25,000.

Annex 3: Fiscal Savings Over the First 5 Years of the RRP

1. <u>Total Savings</u>. Various measures can be considered which could reduce and/or defer fiscal payments over the initial period of the program. This option was discussed in connection with Table 4 in the text. Due to the complexity of the calculation of savings through the pension buyout scheme, more detail is given below.

Savings from the Pension Buyout Option

The fiscal savings from this scheme for the first 5 years is equal to the total payout of farm capital through government grant (R1.89 million) minus payouts of pension over the first 5 years.

The following assumptions are used:

- (i) percentage farm assets purchased under the pension buyout equals 50% of total farm assets;
- (ii) discount on farm assets is 20%;
- (iii) real interest paid on outstanding value of farm assets equals 4% p.a.
- (iv) pension payment period is 15 years;
- (v) pension payouts consists of 15 equal payouts on asset value plus interest on outstanding value of farm assets;
- (vi) assets are purchased equally over 5 years (i.e., 20% purchase p.a.)
- (vii) conversion factor equals 1.37 (see (ii)).

The costing is shown in Table A.

Table B: Costing of Pension Buyout Option Savings (in million Rands)

				Years		
	Items	1	2	3	4	5
1	Pension payment on purchases (20% per annum)	20	40	60	80	100
2	Outstanding balance	357	694	1,011	1,308	1,585
3	Interest cost on outstanding balance	14.3	28	40	52	63
4	Total annual pension payment	34.3	68	100	132	163
5	Total grant option payment	378	378	378	378	378
6	Savings	343.7	310.0	278	246	215
	Average savings p	er annum	= R278.	0 million		

Annex 4: Cost Assumptions

Total Fixed Overheads

This includes the cost of training, training the trainers, dissemination, and administration and processing of land claims and transfers through a local/regional and national land committee systems, and land courts.

The assumption is that a start-up process lasting for five years will be required to allow for effective implementation.

These are incremental costs which can be directly ascribed to the implementation of the RRP.

Training and dissemination costs

The purpose of training and dissemination is to ensure that communities are informed of their rights under the RRP.

- a. <u>Dissemination</u>. The assumption is that 5 person teams consisting of legal experts, agronomists, economists, community development experts and a facilitator (translator, etc.) will be able to conduct two training sessions per week reaching 200-300 people per session (indicating 100 sessions over a two year period per team). The cost of a sessions amounts to R20,000 of which half is for professional fees, R4,000 for S&T and R6,000 for meals and accommodation for those attending. 10,000 workshops are necessary to cover 30% of the adult rural population. This gives a total cost of R200m with 100 training teams active.
- b. <u>Training the trainers</u>. It is proposed that each training team will undergo 30 days of intensive training. The total costs will be R12m in salaries. In addition, each team leader will be exposed to national and international small farmer experience at a cost of R7,000 per person (R0.7m total).
- c. Overhead costs for training and dissemination. The following cost items are included:
 - 1. 5m manuals at R3 each (R15m)
 - 2. development costs for manuals (R5m)
 - 3. additional NGO and CBO training (r50m)
 - 4. overhead managements fee at 10% of total training and management costs (R28.2m)

The total training and dissemination cost therefore amounts to R310.9m.

Land Claims and Transfers

<u>Local land committees</u>. It is assumed that each of these will consist of 12 members, meeting for one day per month, or effectively 10 days per year. Professional fees are calculated at R10,000 per meeting or R100,000 per year.

Each committee has three full time staff members plus a secretary. Staff costs amount to R200,000 per year

Court costs, i.e., legal plus surveyors, etc. are budgeted at R100,000 per annum. It is assumed that 250 district committees will be active throughout the country. The total costs are therefore R400,000 x 250 per year, or R500m over 5 years.

National land committee. It is assumed that 12 members will meet one day a week for 40 weeks annually. Professional fees are calculated at R1m (12 x 40 x R2,000). Travel and related costs will amount to R1,500 per member per meeting, or R0.75m). Support staff are assumed to be drawn from the civil service and are therefore incremental. The total cost for the National Land Committee is therefore R8.75m over 5 years.

<u>Land Courts</u>. Each land court will cover 10 districts. Each court will have three professional staff (legal and land experts), plus three para-legal and two secretaries. The costs are assumed to be R1m per annum per court, i.e., R125m over 5 years. The total fixed overhead costs therefore come to R943.75m over 5 years.

<u>Rural Infrastructure</u>. This section describes the incremental costs of rural infrastructure and social services which can be directly ascribed to the RRP. Both the infrastructure and the start-up grants will be provided to the farm and non-farm rural households under the RRP. The total number of households reached by the RRP is approximately 1.9m.

<u>Electricity</u>. Based on the national standard the connection costs of electricity, which is estimated to be R7,000 per connection. Due to the existing connection costs in rural areas, the average connection cost for RRP beneficiaries is estimated at R5,000. This cost will accommodate the upgrading of existing powerlines to accommodate the denser settlement patterns.

<u>Water Supply</u>. Water supply costs for spring protection, hand pumps, improvements to existing systems, new schemes and a stand pipe (no further than 100 meters from a residence) is estimated at R200 per capita (or R12000/household).

Sanitation. A cost of R1,000 per household is estimated.

Roads. A cost of R300 per household was estimated based on standard road building costs.

<u>Education</u>. The only incremental cost of education is assumed to be the additional costs associated with dispersion of service provision in rural

areas. This amounts to capital costs of R1800 per household and recurrent costs of R2400 per household, based on mid range estimates of pupil/teacher and teacher/classroom ratios.

<u>Health</u>. The assumptions for health services provision are the same as for education. The total capital cost is estimated to be R150/household and R600/household for recurrent costs.

<u>Land for community services</u>. Land for community services was not costed as the area is assumed to be negligible and marginal land could be used.